



Geethanjali College of Engineering and Technology (Autonomous)

Accredited by NAAC with A⁺ Grade; B.Tech. CSE, EEE, ECE accredited by NBA

Sy. No: 33 & 34, Cheeryal (V), Keesara (M), Medchal District, Telangana – 501301

Annexure-5.6

Innovation in Teaching

S.NO	Name of the faculty	Methodology
1	V.Sravanthi	Musical Experience and Peer Discussion
2	S. Durga Prasad	Flipped learning
3	Dr. A. Hariprasad Reddy	Flipped learning
4	A.SrinivasRao	Hacker rank
5	Dr. A Sree Lakshmi	Google Classroom
6	M Swapna Rani	Quizizz and Peer Discussions
7	Dr.NehaNandal	Flipped learning
8	P Ushasree	Case Study

Faculty Name: V.Sravanthi

Subject : Theory of Computation

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE-F

Title: “Compiler Design as a Musical Experience”

Introduction:

Teaching compiler design can sometimes be challenging due to its technical complexity. To make learning more engaging and interactive, we introduced an **innovative teaching method** where students **present compiler phases through a song**. This approach **blends music with learning** to improve retention and interest in the subject.

Concept:

- The entire **compiler design process (Lexical Analysis, Syntax Analysis, Semantic Analysis, Intermediate Code Generation, Optimization, and Code Generation)** is broken down into **verses** of a song.
- Students **collaborate to create lyrics** that explain each phase in a simple and rhythmic manner.
- The song follows a structured format, making it **fun and memorable** for everyone.

Implementation Steps:

1. **Divide Students into Groups** – Each group focuses on one phase of the compiler.
2. **Create Lyrics** – Students compose simple, catchy lyrics explaining the phase's role and function.
3. **Add a Tune** – The song is set to a familiar melody or a simple beat.
4. **Practice & Perform** – Students rehearse and present the song in class.
5. **Discussion & Reinforcement** – After the performance, the instructor discusses key takeaways and clarifies doubts.

Benefits:

- ✓ **Engagement & Creativity** – Encourages students to think outside the box.
- ✓ **Better Retention** – Rhythm and melody help in memorizing technical concepts.

- ✓ **Collaborative Learning** – Teamwork fosters a deeper understanding.
- ✓ **Enjoyable Learning Environment** – Reduces stress and makes compiler design fun!

This approach transforms a traditional lecture into a **dynamic, participatory, and memorable learning experience**, aligning with modern pedagogical strategies for B.Tech students.



Faculty Name: V.Sravanthi

Subject : Theory of Computation

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE-A

Title: Interactive Analytical Discussion on Turing Machines: Benefits & Drawbacks

Introduction:

Teaching **Theory of Computation (TOC) machines** (such as Finite Automata, Pushdown Automata, and Turing Machines) can be challenging for students due to their abstract nature. To make learning more **interactive and engaging**, an **innovative teaching approach** is introduced where a few students compare different TOC machines, while the rest of the class participates in a discussion on their benefits and drawbacks.

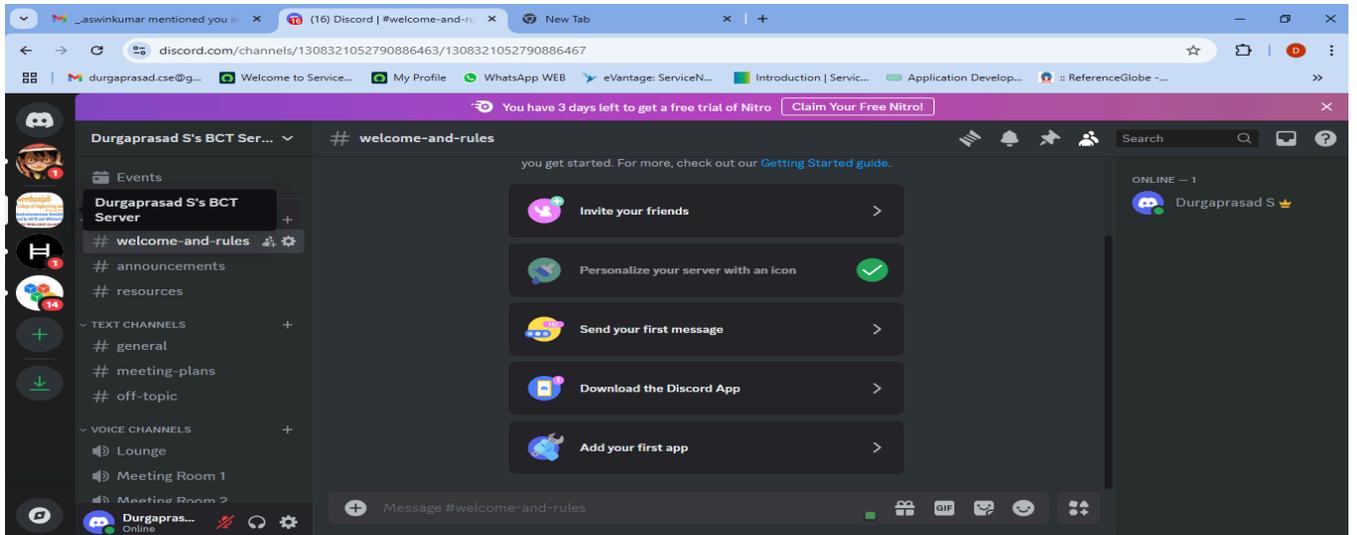
Methodology:

- **Role-Based Debate:** Assigned roles each machine
- **Case Study Analysis:** Provide examples where Turing Machines concepts are applied (e.g., modern computation, AI) to link theory with practical applications.
- **Mind Maps & Infographics:** Encourage students to present their discussions visually through diagrams, charts, or short presentations.

Outcomes:

- Deeper conceptual understanding through peer discussion.
- Improved critical thinking and problem-solving skills.
- Engagement through interactive and student-led learning.





Faculty name: Dr. A. Hariprasad Reddy

In my flipped learning, I suggest students watch my online videos (YouTube) Or other online learning material at home, freeing up class time for more interactive and hands-on activities.

The image shows a screenshot of a mobile device displaying handwritten notes on a lined paper background. The notes are written in black ink and discuss the concept of an Expert System Shell. The text includes:

- Expert System Shell**
- The expert system shell simplifies the process of creating an expert system in a faster, cheaper and more efficient way.
- Definition
- An Expert System Shell (ESS) provides a framework that is used for the development of an expert system. It does not contain knowledge base. In other words, we can say that it is a ready-made expert system without knowledge base. Depending upon requirements, knowledge engineers feed domain specific knowledge in knowledge base of the knowledge engineer. Expert level knowledge of diagnosis of program that the tool will behaves as an expert system for diagnosis of program part. Thus an expert system shell provides a quick way of developing expert system.
- Merits of Expert System Shell
 - There is no need to build shell again and again for new expert system. Hence time required in building user interface and inference engine is not needed.
 - Development of an expert system becomes faster, cheaper and more efficient.
 - It doesn't require some experience programmer because there is no need to develop the system from scratch.

Below the notes is a YouTube video player interface. The video title is "Expert system SHELL- Artificial intelligence" with 6K views and posted 4 years ago. The channel name is "Hariprasad Reddy" with 29 subscribers. The video has 78 likes and 2 comments. The interface includes buttons for "Share", "Remix", and "Download".

Faculty Name : A. SrinivasaRao
Subject : PPS-1
Academic Year : 2024-25
Year : I-B. Tech I-Sem
Class : CSE – A & CSE-B
ALM : **Case Studies and Self-Assessment**

Description:

1. Students are in an active learning role, and are encouraged to solve problems, and enhance problem solving skills through online coding platforms HackerRank, CodeChef, etc.,
2. Students are taking self-assessments by attending online coding contest “Codechef Starter”.

Here are the results and outcomes:

The screenshot displays a CodeChef user profile for Durga Prasad Reddy Jakku. The profile information includes a profile picture, username (durga_prasad04), country (India), student status, and institution (Geethanjali College of Engineering and Technology, Hyderabad Telangana, India). The CodeChef Pro Plan is listed as 'No Active Plan'. The activity heat map shows activity from May to November, with a 'Last 6 Months' filter. The right sidebar features a large rating of 1055 (Div 4) with a star icon, a CodeChef Rating of 1055 (Highest Rating 1055), and ranks of 130380 (Global Rank) and 123314 (Country Rank). Below this, there is a 'Skill tests' section with a 'No test taken' message and a 'View skill tests' link. At the bottom, there is a 'Badges' section with a share icon.



Durga Prasad Reddy J...
@durgaprasadred17



Complete your profile

Add your missing details →

This data will be helpful to auto-fill your job applications



Personal Information



✉ durgaprasadreddy17@gmail.com

☎ Add your mobile number

📍 India

My Badges



My Resume

+ Add Resume

Add your resume here

My Certifications

You have not earned any certificates yet. [Get Certified](#)

EEO settings



Work Experience

+ Add Work Experience

Add your work experiences. Don't forget to add those internships as well.

Education

+ Add Education

We believe in skills over pedigree, but go ahead add your education for the recruiters who don't.

Links

+ Add Links

Add all the relevant links that help in knowing you as a hacker

My Skills

+ Add Skills

Add all the relevant skills that speak on your behalf



Pavan Malji




Username: ★ pavanmalji0704

Country:  India

Student/Professional: Student

Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India

CodeChef Pro Plan: No Active Plan. [View Details](#)

Activity Heat Map Last 6 Months ▾

	May	Jun	Jul	Aug	Sep	Oct	Nov
Mon	■	■	■	■	■	■	■
Wed	■	■	■	■	■	■	■
Fri	■	■	■	■	■	■	■
Sun	■	■	■	■	■	■	■

1011?

(Div 4)

★

CodeChef Rating
(Highest Rating 1011)

144646

Global Rank

137149

Country Rank

Skill tests



Build a strong profile by taking skill tests

No test taken Your percent score will appear here

[View skill tests](#)

Badges 



Pavan Malji 

@pavanmalji8

Personal Information

✉ 2471a0586@geet.edu.in

☎ +91-8143931013

📍 India

Complete your profile

Add your missing details →

This data will be helpful to auto-fill your job applications

40%

My Badges



Problem Solving
★



Python



C Language
**



Mahathi Relangi



Username: colony_pool_51

Country: India

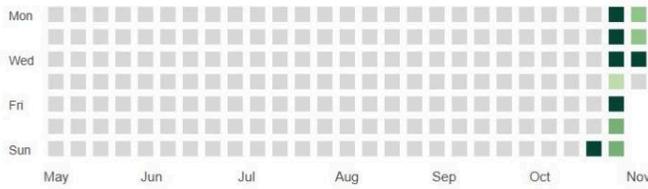
Student/Professional: Student

Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India

CodeChef Pro Plan: No Active Plan. [View Details](#)

Activity Heat Map

Last 6 Months



787?

(Div 4)



CodeChef Rating

(Highest Rating 787)

203946

Global Rank

194754

Country Rank

Skill tests

60%

C language online test

Attempted on November 2024

[View skill tests](#)

Badges



Mahathi Relangi

@relangimahathi



Complete your profile

Add your missing details →

This data will be helpful to auto-fill your job applications



Personal Information



relangimahathi@gmail.com

Add your mobile number

India

My Badges





Rishith Kumar Guntuka



Username: 1★ spargy4050v

Country: India

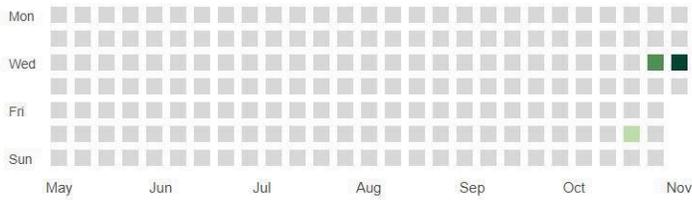
Student/Professional: Student

Institution: Geethanjali College of Engineering and Technology, Hyderabad Telangana, India

CodeChef Pro Plan: No Active Plan [View Details](#)

Activity Heat Map

Last 6 Months ▾



774?

(Div 4)



CodeChef Rating

(Highest Rating 774)

206219

Global Rank

196968

Country Rank

Skill tests



No test taken

Build a strong profile by taking skill tests

Your percent score will appear here

[View skill tests](#)

Badges



Rishith Kumar Guntuka

@spargy4050v



Complete your profile

Add your missing details →

This data will be helpful to auto-fill your job applications



Personal Information



✉ spargy4050v@gmail.com

☎ +91-9866257903

📍 India

My Badges



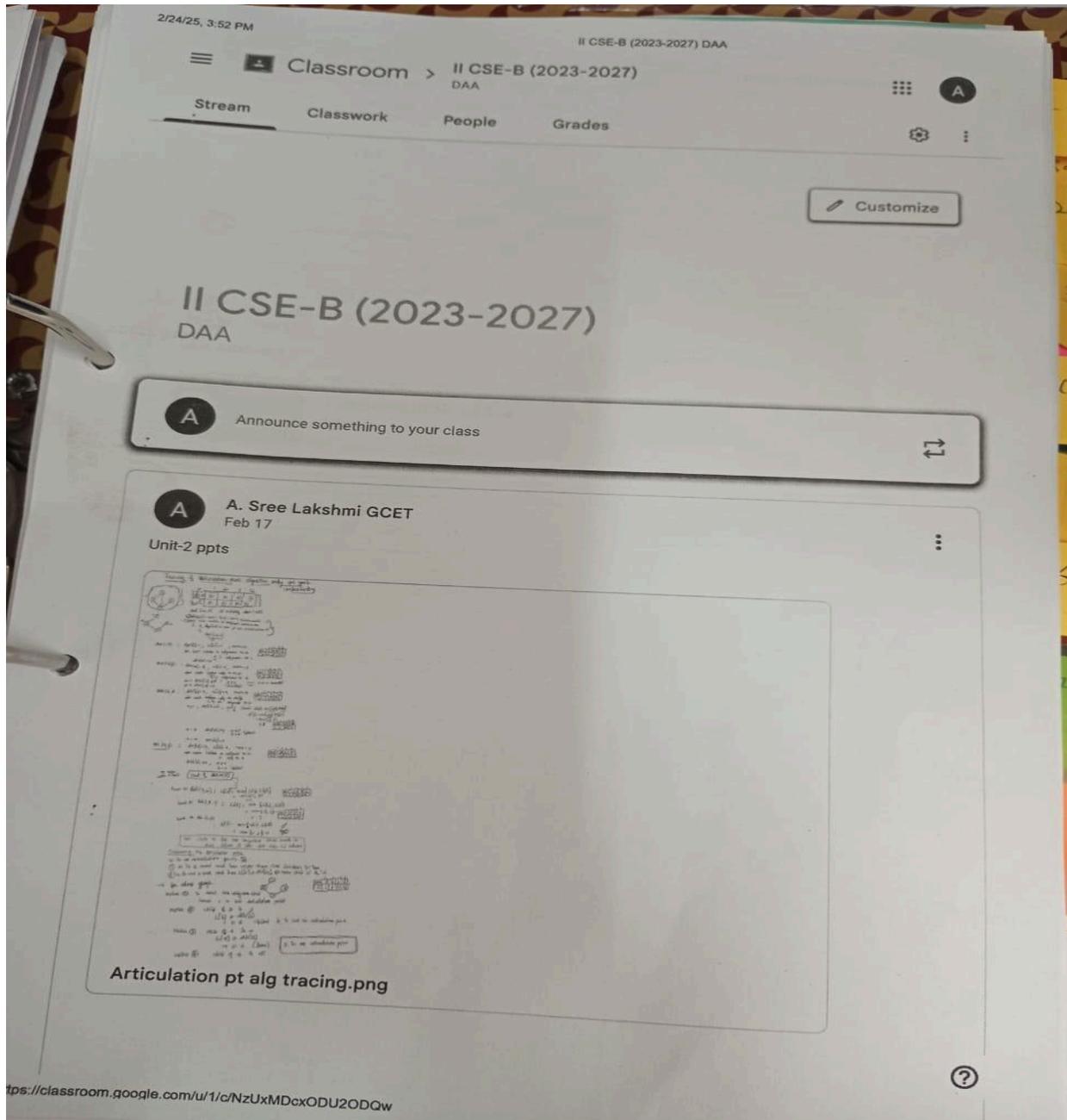
Faculty Name: Dr. A Sreelakshmi.

Subject : Design and Analysis of Algorithms and OOPs

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE



2/24/25, 3:52 PM

II CSE-B (2023-2027) DAA

What are Disjoint Sets?

What are Disjoint Sets? PDF

Disjoint sets.pdf
PDF

Unit 2- Biconnected...

Unit2- Biconnected...
PDF

Stream

Classwork

People

Grades

DAA Unit 2

Unit 2- Biconnected...
PDF

A

Add class comment...



A

A. Sree Lakshmi GCET
Feb 17



DAA text book



Fundamentals of C...
PDF

A

Add class comment...



Customize

II CSE-C

C

A Announce something to your class

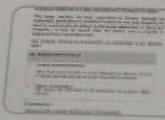
A. Sree Lakshmi GCET posted a new assignment: Oracle course certificate
Dec 12, 2024

A. Sree Lakshmi GCET posted a new assignment: Theory presentations & re...
Dec 12, 2024

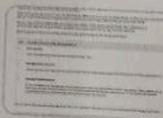
A. Sree Lakshmi GCET posted a new assignment: PBL presentations, reports...
Dec 12, 2024 (Edited Dec 12, 2024)

A A. Sree Lakshmi GCET
Dec 12, 2024

Collection notes



Collections.docx
Microsoft Word



11(ArrayList).pdf
PDF



Add class comment...



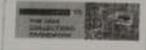
A. Sree Lakshmi GCET
Dec 4, 2024



unit5-collections



Unit5 collections.pdf
PDF



Unit5 collections1.p...
Microsoft PowerPoint



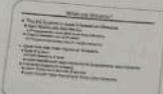
Add class comment...



A. Sree Lakshmi GCET
Dec 4, 2024



Unit-5 io streams



Unit5 io.pdf
PDF



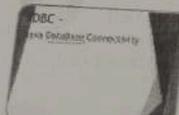
Add class comment...



A. Sree Lakshmi GCET
Dec 4, 2024



Unit-5 ppt on jdbc



Unit5 jdbc.pdf
PDF



Add class comment...



A. Sree Lakshmi GCET
Dec 4, 2024

Faculty Name: M. Swapna Rani.

Subject : Python Programming

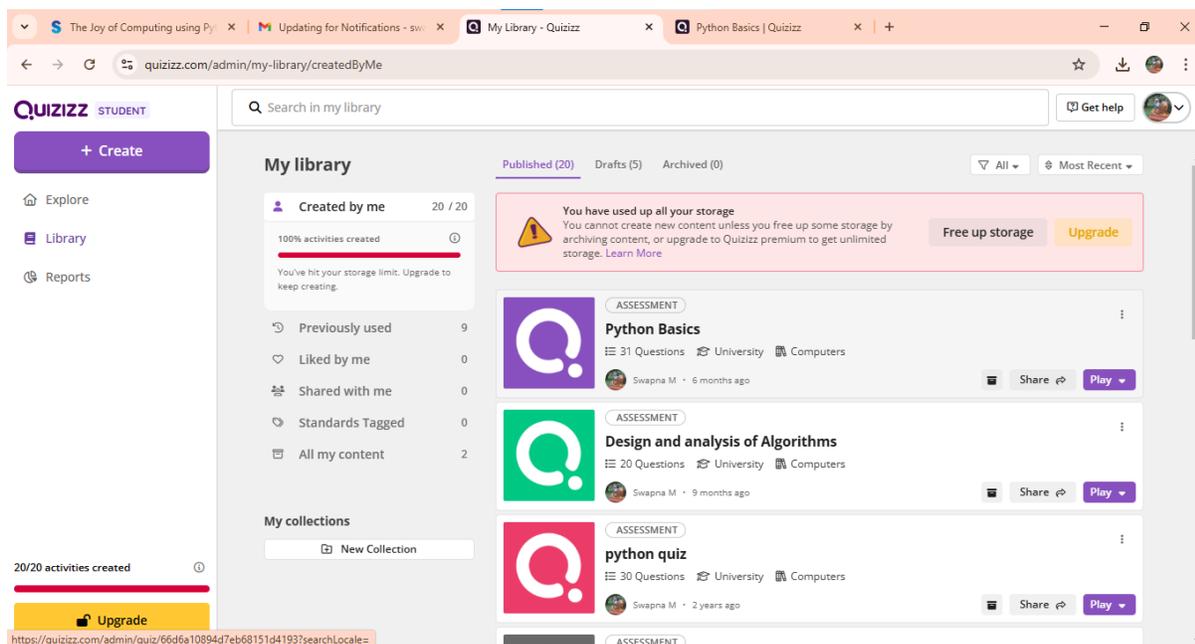
Academic Year : 2024-25

Year : II-B. Tech I-Sem

Class : CSE

Quizizz:

Quizizz is an innovative educational platform that empowers faculty to enhance their teaching and learning methods. I have used Quizizz to conduct an interactive quiz on “**Python Programming**” for assessment of students which include various question types such as multiple-choice, true/false, and short answer. It provides real-time feedback to students, allowing them to understand their mistakes and learn from them immediately. This feature helps in reinforcing learning and improving retention



The screenshot displays the Quizizz admin interface. At the top, there are browser tabs for 'The Joy of Computing using Py...', 'Updating for Notifications - sw...', 'My Library - Quizizz', and 'Python Basics | Quizizz'. The address bar shows 'quizizz.com/admin/my-library/createdByMe'. The main content area is titled 'My library' and includes a search bar, a 'Get help' button, and a navigation menu with 'Create', 'Explore', 'Library', and 'Reports'. A prominent warning banner states: 'You have used up all your storage. You cannot create new content unless you free up some storage by archiving content, or upgrade to Quizizz premium to get unlimited storage. Learn More'. Below this, a list of quizzes is shown, including 'Python Basics' (31 Questions, University, Computers, 6 months ago), 'Design and analysis of Algorithms' (20 Questions, University, Computers, 9 months ago), and 'python quiz' (30 Questions, University, Computers, 2 years ago). Each quiz entry has 'Share' and 'Play' buttons. A sidebar on the left shows 'Created by me' with a progress bar at 100% and '20 / 20' activities created. Other filters include 'Previously used' (9), 'Liked by me' (0), 'Shared with me' (0), 'Standards Tagged' (0), and 'All my content' (2). At the bottom, there is a 'My collections' section with a 'New Collection' button and an 'Upgrade' button.

QUIZZZ STUDENT

+ Create

- Explore
- Library
- Reports

20/20 activities created

Upgrade

Search in my reports

Get help

Filter by: All Games All Reports All Classes Filter by Date

Type	Quiz Name	Total Participants	Accuracy	Code	Class	Actions
Live	Python Basics Sep 6, 2024	18	50%			Assign homework
Live	Python Basics Sep 5, 2024	21	51%			Assign homework
Live	Python Basics Sep 4, 2024	32	54%			Assign homework
Challenge	Python Basics Sep 3, 2024	50	57%			
Live	Design and analysis of Algorithms May 31, 2024	38	77%			Assign homework
Live	python quiz Dec 16, 2022	35	74%			Assign homework
Live	java Mar 26, 2023	29	71%			Assign homework

QUIZZZ STUDENT

+ Create

- Explore
- Library
- Reports

20/20 activities created

Upgrade

Python Basics Completed

Started : Sep 03, 2024, 01:50 PM (6 months ago)

Challenge quiz

Accuracy 57%

Completion Rate 92%

Total Students 46

Questions 31

View quiz

Email all parents Share report

Participants Questions Overview Tags BETA

Showing Best attempt Sort by: Accuracy

Correct Incorrect Unattempted

Name	Accuracy	Points	Score	Actions
Gunjana	97%	-	31330	Evaluate

NPTEL

I Mentor the students regarding The NPTEL course "The Joy of Computing using Python". It is a remarkable example of innovation in teaching and learning. This course, offered by IIT Ropar and coordinated by Prof. SudarshanIyengar and Prof. Yayati Gupta, brings a fresh and engaging approach to learning programming.

Here are some innovative aspects of the course:

1. **Engaging Content:** The course is designed to make learning programming fun and accessible. It uses anecdotes, analogies, and illustrative examples to explain complex concepts, turning abstractions into insights and engineering into art.
2. **Logical Thinking:** The course focuses on inspiring learners to think logically and arrive at solutions programmatically. This approach helps students develop critical thinking and problem-solving skills.
3. **Real-World Applications:** The course includes practical examples and applications, such as creating a currency converter, analysing Facebook data, and developing games like Tic Tac Toe and Snakes and Ladders. These real-world applications make learning more relevant and interesting.
4. **Current Advances in Computing:** Towards the end of the course, students are introduced to some of the latest advances in computing, motivating enthusiastic learners to pursue further studies in the field.
5. **Accessibility:** The course is available online, making it accessible to a wide audience. It is designed for anyone interested in learning programming, regardless of their background.

By incorporating these innovative elements, "The Joy of Computing using Python" enhances the teaching and learning experience, making it a valuable resource for both educators and students.

The Joy of Computing using Python | onlinecourses.nptel.ac.in/noc24_cs113/unit?unit=17&lesson=18

swayam | swapna20186@gmail.com

NPTEL » The Joy of Computing using Python

Announcements About the Course Q&A Progress Mentor Mentee List Review Assignment Course Recommendations

Introduction to Programming

Loading ...

Course outline

- About NPTEL
- How does an NPTEL online course work?
- Week 0
- Week 1
 - Introduction to Programming
 - Why Programming?
 - Programming for Everybody
 - Any Prerequisites?
 - Where to start?
 - Why do we have so many languages?

The Joy of Computing using Python | Updating for Notifications - sw | onlinecourses.nptel.ac.in/noc24_cs113/unit=37&assessment=444

swayam | swapna20186@gmail.com

NPTEL » The Joy of Computing using Python

Announcements About the Course Q&A Progress Mentor Mentee List Review Assignment Course Recommendations

Week 2: Assignment 2

The due date for submitting this assignment has passed. **Due on 2024-08-07, 23:59 IST.**

Assignment submitted on 2024-08-06, 05:00 IST

1) Statement : If a variable is assigned multiple times, the latest value is not stored in the variable **1 point**

False, the variable stores all values it was assigned
 False, the variable stores the value from the latest assignment.
 True, the variable stores the value from the second-last assignment.
 True, the variable stores value from the initial assignment

Yes, the answer is correct.
Score: 1
Accepted Answers:
False, the variable stores the value from the latest assignment.

2) Which of the following code blocks print - "Hello Ram Lakshman and Hanuman I" ? **1 point**

```
name1 = "Ram"
name2 = "Lakshman"
```

Faculty Name: M. Swapna Rani.

Subject : Design and Analysis of Algorithms

Academic Year : 2024-25

Year : II-B. Tech II-Sem

Class : CSE

Peer Discussions:

I have divided the class into small groups to discuss applications of greedy algorithms such as (Prims algorithm, Kruskal Algorithm, Job Sequencing with deadlines,0/1 knapsack problem, Single source shortest path problem). Peer discussions enhance collaborative learning, critical thinking, and understanding of complex concepts through active engagement.

Objectives:

- Develop a deeper understanding of algorithms and their applications.
- Encourage collaborative learning and knowledge sharing among students.
- Enhance critical thinking and problem-solving skills through discussion.





GPS Map Camera

Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala
Village, Secunderabad, Telangana 501301, India
Lat 17.521062° Long 78.630781°



GPS Map Camera

Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala
Village, Secunderabad, Telangana 501301, India
Lat 17.521091° Long 78.630765°



Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala
Village, Secunderabad, Telangana 501301, India
Lat:17.521071° Long:78.630783°



Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala
Village, Secunderabad, Telangana 501301, India
Lat:17.521128° Long:78.63078°



GPS Map Camera

Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala
Village, Secunderabad, Telangana 501301, India
Lat 17.52108° Long 78.630687°



GPS Map Camera

Secunderabad, Telangana, India
Cheeryal Village, Keesara Mandal, Medchal District., Chiryala
Village, Secunderabad, Telangana 501301, India
Lat 17.521117° Long 78.630735°

Faculty Name: Dr. Neha Nandal

Academic Year : 2024-25

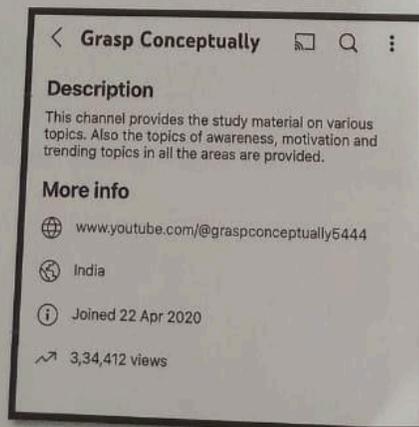
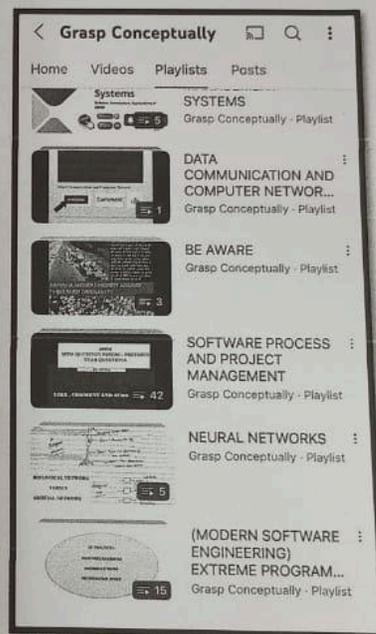
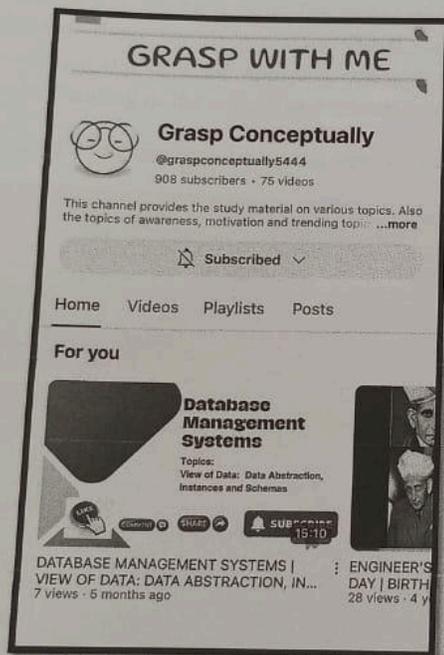
Year : II-B. Tech I-Sem

Class : CSE

Facility used: Youtube

I have been using YouTube as a platform to teach my students by creating and uploading educational videos. These videos cover key concepts, explanations, and demonstrations to enhance their learning experience. My YouTube channel serves as an extension of classroom teaching, allowing students to revisit lessons at their convenience. Attached are screenshots of my channel and video analytics as evidence of my engagement in online education.

Link: https://youtube.com/@graspconceptually5444?si=EFeIVkTEGmP_XyB



S.NO	Name of the faculty	Course	Methodology
1	Ushashree P	Big Data Analytics	Case Study

To make the Big Data Analytics course more engaging and practical for final-year students, a case study-based teaching approach was introduced. Primarily it was used to help students understand the real-world applications of R programming and Tableau by working with actual datasets. Students were given different datasets through Google Classroom and were asked to analyze them using Tableau to derive meaningful insights. This hands-on experience allowed them to explore data visualization techniques, interpret patterns, and develop analytical thinking. By applying concepts to real-world scenarios, students gained a deeper understanding of the subject and improved their problem-solving skills.

Students engagement during the case study based teaching





Snaps of students being Assigned case study using google classroom

Classroom > BDA 24-25

Home
Calendar
Teaching
To review
Design Thinking 24-25 CSE_E
BDA 24-25 B
BDA 24-25 A
BDA -D 2023-2024
BDA C
Archived classes

Case Study Teams for Assignment-2

P Ushashree GCET • Nov 26, 2024

Dear Students,
As a part of Assignment-2 all the students are informed to form a group of three and submit a case study in tableau. In this regard google sheet is shared,fill the team details.

Once teams are formed Datasets will be assigned to proceed further with case study implementation.

<https://docs.google.com/spreadsheets/d/1gJg12tnZncsEky0jnnuJGS3C0nWrMx3FQguyV3ues/edit?usp=sharing>

Kindly fill the team details in the sheet on or before 27th Nov 2024.

Class comments

Add class comment...

Student Submissions Sample

Assignment-2 Case Study

21R11A0578 KANKATI PRAGNYA Turned in

Return

The submission displays a Tableau dashboard with the following visualizations:

- TOTAL NO. OF MALES AND FEMALES:** A pie chart showing the distribution of males and females.
- CALORIES BURNED WITH DIFFERENT WORKOUTS:** A horizontal bar chart comparing calories burned across different workout types.
- NUMBER OF FEMALES AND MALES (Age):** A pie chart showing the distribution of males and females across different age groups.
- BMI CATEGORY:** A bar chart showing the distribution of BMI categories (Normal, Obese, Overweight, Underweight).
- TYPE OF WORKOUT:** A bar chart showing the distribution of workout types (Cardio, HIIT, Strength, Yoga).
- SESSION DURATION VS CALORIES BURNED:** A scatter plot showing the relationship between session duration and calories burned.
- EXPERIENCE VS AVG WORKOUT AND WATER INTAKE:** A line chart showing the relationship between experience level and average workout duration and water intake.

Files

Turned in on Dec 8, 2024, 4:59 PM
See history

IMG-20241208-W...

Grade

/5

Private comments

Add private comment...

BDA_REPORT_3.pdf

Open with Google Docs

3. DASHBOARD

The dashboard displays several data visualizations: a pie chart for 'Orders against quantity', a bar chart for 'Fulfillment against status', a bar chart for 'Courier status against ship services', a bar chart for 'Size against Category', a bar chart for 'City By Month', a line chart for 'City By Weekday', a map of India for 'Map by quantity', and a world map for 'Map By Amount'. A legend on the right side lists categories like 'Small', 'Medium', and 'Large'. The Amazon logo is visible on the left side of the dashboard.

Fig-3 Amazon Sale Dashboard

Page 10 / 13

Files

Turned in on Dec 8, 2024, 10:19 PM
[See history](#)

BDA_REPORT_3.pdf

Grade

/5

Private comments

Add private comment...