

Logic Building with Python

Assignment 03

Task #1: Sequence Printing

- Write programs that generate the following patterns:
 - 1 3 5 7 9 11 ... 99 (All odd numbers less than 100)
 - 0 2 4 6 8 10 ... 98 (All evens lesser than 100)
 - 99 97 95 ... 7 5 3 1 (All odd numbers less than 100, in reverse order)
 - 98 96 94 92 ... 8 6 4 2 0 (All evens lesser than 100, in reverse order)
 - Print all numbers from start to end (take input).
- Write a program which takes **Start** and **End** as input and prints the square, cube, power 4 and power 5 of all the number in the given range. Here is the example:

```
Start: 10
End: 20
i      i^2      i^3      i^4      i^5
10     100     1000    10000   100000
11     121     1331    14641   161051
12     144     1728    20736   248832
13     169     2197    28561   371293
14     196     2744    38416   537824
15     225     3375    50625   759375
16     256     4096    65536   1048576
17     289     4913    83521   1419857
18     324     5832    104976  1889568
19     361     6859    130321  2476099
20     400     8000    160000  3200000
```

Task # 2: Table Printing

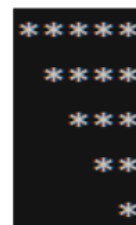
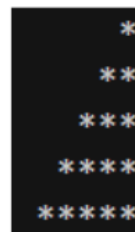
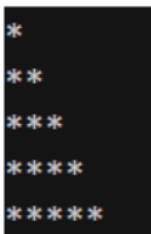
- Write a program which prints the table of the given **input** and the **start** and the **end** and print the table in the given range.
- Write a program to print an odd number table using a for loop

```
-----Odd table Printing-----
Enter the number of which you want table: 16
Enter the range: 10
16x1=16
16x3=48
16x5=80
16x7=112
16x9=144
```

- Write a program to print an even number table using a for loop

Task # 3: Shape Printing

1. Take two inputs **Length** and **Width** and print the rectangle made up of stars.
 - Replace star with any other character taken from the user.
 - Replace the character by taking input your name
2. Print triangles of stars using a for loop.
Make these 4 triangles, dependent on the height (which your program must take input from the console).



Good luck
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Happy Coding