

Question based on module

1. What **possible output(s)** are expected to be displayed on screen at the time of execution of the following code ?

Given code	Given Options :	
<pre>import random S=["Pen","Pencil","Eraser","Bag","Book"] for i in range (1,2): f=random.randint(i,3) s=random.randint(i+1,4) print(S[f],S[s],sep=":")</pre>	(I) Pencil:Book	(II) Pencil:Book Eraser:Bag
	(III) Pen:Book Bag:Book	(IV) Bag:Eraser

Ans:- range(1,2) will generate a sequence containing only 1 so i=1, (loop runs only once)

So option number (II) and (III) are rejected

f=random.randint(1,3),

so f can be any value from 1,2 or 3 (randint- both end included)

s=random.randint(2,4), so s can be any value from 2,3,4

print(s[f], s[s], end= ":",)

for first position(s[f]) value can be any value from "Pencil", "Eraser", "Bag" is allowed

for second position (s[s])value any value from "Eraser","Bag","Book" is allowed

both option (I) and (IV) fulfill this.

So Option (I) and (IV), both are correct answer.

2023-main

17. **Assertion (A)** : To use a function from a particular module, we need to import the module.

Reason (R) : import statement can be written anywhere in the program, before using a function from that module.

Ans:- (b) Both (A) and (R) are true and (R) is not the correct explanation for (A)

32. What **possible output(s)** are expected to be displayed on screen at the time of execution of the following program:

Given code	Given Options :	
<pre>import random M=[5,10,15,20,25,30] for i in range(1,3): first=random.randint(2,5)-1 sec=random.randint(3,6)-2 third=random.randint(1,4) print(M[first], M[sec], M[third],sep="#")</pre>	I) 10#25#15 20#25#25	(II) 5#25#20 25#20#15
	iii) 30#20#20 20#25#25	(IV) 10#15#25# 15#20#10#

Ans:-range(1,3) will generate a sequence containing 1 and 2 (loop runs for i=1 and i=2) for i=1

first=random.randint(2,5)-1, so first can be any value from (2,3,4,5) -1=(1,2,3,4)

sec=random.randint(3,6)-2, so sec can be any value from (3,4,5,6) -2=(1,2,3,4)

third=random.randint(1,4), so third can be any value from (1,2,3,4)

print(M[first], M[sec], M[third],sep="#") , sep= "#" so M[first]#M[sec]#M[third]

for first position(M[first]), any value from 10,15,20,25 is allowed
 for second position(M[sec]), any value from 10,15,20,25 is allowed
 for third position(M[third]), any value from 10,15,20,25 is allowed
 this will execute one more time for i=2
 in option (II) 5 is at first position that is not allowed
 in option (III) 30 is at first position that is not allowed
 in option (IV) # is given at end of each line which cannot be done with sep.
 So Option (I) is correct answer.

2021-comp

1. What possible **output(s) is/are** expected to be displayed on the screen at the time of execution of the program from the following code ? Also specify the **maximum and minimum value** that can be assigned to the variable **R** when **K** is assigned value as **2**. 2

Given code	Given Options :	
<pre>import random Signal = ['Stop', 'Wait', 'Go'] for K in range(2, 0, -1): R = randrange(K) print (Signal[R], end = ' # ')</pre>	(a) Stop # Wait # Go #	(b) Wait # Stop #
	(c) Go # Wait #	(d) Go # Stop #

Ans:- randrange() raises NameError because function belong to a module should be used with module name :- it should be R=random.randrange(K)

If we do the required correction then answer will

range(2,0,-1) will generate a sequence containing 2 and 1 (loop runs for K=2 and K=1)
 for K=2

R=random.randrange(K) **maximum value :-1 and minimum value:-0**

so R can be any value from **0 and 1** (randrange not include limit)

print(Signal[R], end= ":") ,

for Signal[R] can have any value from 'Stop' and 'Wait' is allowed

for K=1

R=random.randrange(K)

so R can be value from 0 (randrange not include limit)

print(Signal[R], end= ":") ,

for Signal[R] can have 'Stop'

So Option (b) Wait # Stop # is correct answer.

2020

1. (c) Name the Python Library modules which need to be imported to invoke the following functions : 1

(i) cos() (ii) randint()

Ans:- (i) cos():- math (ii) randint():- random

2. What **possible output(s)** are expected to be displayed on screen at the time of execution of the program from the following code ? Also specify **the minimum and maximum values** that can be assigned to the variable **End**.

Given code	Given Options :
<pre>import random Colours = ["VIOLET", "INDIGO", "BLUE", "GREEN", "YELLOW", "ORANGE", "RED"] End = randrange(2)+3 Begin = randrange(End)+1 for i in range(Begin,End): print(Colours[i],end="&")</pre>	(i) INDIGO&BLUE&GREEN&
	(ii) VIOLET&INDIGO&BLUE&
	(iii) BLUE&GREEN&YELLOW&
	(iv) GREEN&YELLOW&ORANGE&

Ans:-(i) INDIGO&BLUE&GREEN&

Minimum Value of End = 3

Maximum Value of End = 4

2019

1. Name the Python Library modules which need to be imported to invoke the following functions : (i) sqrt() (ii) start()

Ans:- (i) sqrt():- math (ii) start():- re

2. What **possible output(s)** are expected to be displayed on screen at the time of execution of the program from the following code ? Also specify **the minimum values** that can be assigned to each of the variables **BEGIN and LAST**.

Given code	Given Options :
<pre>import random VALUES=[10,20,30,40,50,60,70,80] BEGIN=random.randint(1,3) LAST=random.randint(BEGIN,4) for I in range(BEGIN, LAST+1): print VALUES[I], "-",</pre>	(i) 30 - 40 - 50 -
	(ii) 10 - 20 - 30 - 40 -
	(iii) 30 - 40 - 50 - 60 -
	(iv) 30 - 40 - 50 - 60 - 70 -

Ans:- i) 30-40-50- Minimum value for BEGIN:1 Minimum value for LAST:1

2018

1. Name the Python Library modules which need to be imported to invoke the following functions . (i) sin() (ii) search()

Ans:- (i) sin():- math (ii) search():- re

2. What **possible outputs(s)** are expected to be displayed on screen at the time of execution of the program from the following code? Also specify the **maximum values** that can be assigned to each of the variables **BEGIN and LAST**.

Given code	Given Options :
<pre>import random POINTS=[20,40,10,30,15]; POINTS=[30,50,20,40,45]; BEGIN=random.randint(1,3) LAST=random.randint(2,4) for C in range(BEGIN, LAST+1): print POINTS[C], "#",</pre>	(i) 20#50#30#
	(ii) 20#40#45#
	(iii) 50#20#40#
	(iv) 30#50#20#

Ans:- (ii) 20#40#45# and (iii) 50#20#40#

Max value for BEGIN 3 Max value for LAST 4

2017

1. Name the Python Library modules which need to be imported to invoke the following functions : 1

(i) floor() (ii) randint()

Ans:- floor()- math ii) randint()-random

2. What are the possible outcome(s) executed from the following code ? Also specify the maximum and minimum values that can be assigned to the variable N.

Given code	Given Options :
<pre>import random NAV = ["LEFT", "FRONT", "RIGHT", "BACK"] ; NUM = random.randint(1,3) NAVG = "" for C in range(NUM,1,-1): NAVG = NAVG+NAV[I] print NAVG</pre>	(i) BACKRIGHT
	(ii) BACKRIGHTFRONT
	(iii) BACK
	(iv) LEFTFRONTRIGHT

Ans:- (i) BACKRIGHT

Max value 3 and minimum value 1 for variable NUM

OR

I not defined

2017 delhi

1. Name the Python Library modules which need to be imported to invoke the following functions : 1 (i) ceil() (ii) randint()

Ans:- (i) ceil() :- math (ii) randint():- random

2. What are the possible outcome(s) executed from the following code? Also specify the maximum and minimum values that can be assigned to variable N.

Given code	Given Options :
<pre>import random SIDES=["EAST", "WEST", "NORTH", "SOUTH"] ; N=random.randint(1,3) OUT="" for I in range(N,1,-1): OUT=OUT+SIDES[I] print OUT</pre>	(i) SOUTHNORTH
	(ii) SOUTHNORTHWEST
	(iii) SOUTH
	(iv) EASTWESTNORTH

Ans:- (i) SOUTHNORTH

Maximum value of N = 3

Minimum value of N = 1

2016

1. Name the Python Library modules which need to be imported to invoke the following functions(i) load() (ii) pow()

Ans:- (i) load():- pickle (ii) pow():- math

1. What are the possible outcome(s) executed from the following code? Also specify the maximum and minimum values that can be assigned to variable PICKER.

Given code	Given Options :	
<pre>import random PICK=random.randint(0,3) CITY=["DELHI","MUMBAI","CHENNAI","KOLKATA"]; for I in CITY: for J in range(1,PICK): print(I,end="") print()</pre>	i) DELHIDELHI MUMBAIMUMBAI CHENNAICHENNAI KOLKATAKOLKATA	II) DELHI DELHIMUMBAI DELHIMUMBAICHENNAI
	III) DELHI MUMBAI CHENNAI KOLKATA	iv) DELHI MUMBAIMUMBAI KOLKATAKOLKATAKOLKATA

Ans:- Option (i) and (iii) are possible

OR

Option (i) only PICK maxval=3 minval=0

SQP-2024

1. What possible outputs(s) will be obtained when the following code is executed?

```
import random
myNumber=random.randint(0,3)
COLOR=["YELLOW","WHITE","BLACK","RED"]
for I in range(1,myNumber):
    print(COLOR[I],end="*")
print()
```

a. RED* WHITE* BLACK*	b. WHITE* BLACK*	c. WHITE* WHITE* BLACK* BLACK*	d. YELLOW* WHITE*WHITE* BLACK* BLACK* BLACK*
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**Ans:- Option b WHITE*
BLACK***

2. Assertion(A): Python Standard Library consists of various modules.

Reasoning(R): A function in a module is used to simplify the code and avoids repetition.

Ans:- Option b

Both A and R are true but R is not the correct explanation for A

3. A list named studentAge stores age of students of a class. Write the Python command to import the required module and (using built-in function) to display the most common age value from the given list.

Ans:- `import statistics`
`print( statistics.mode(studentAge) )`

SQP-2022

1. What will be the output of the following code?

```
import random
List=["Delhi","Mumbai","Chennai","Kolkata"]
for y in range(4):
    x = random.randint(1,3)
```

- ```
print(List[x],end="#")
```
- a. Delhi#Mumbai#Chennai#Kolkata#
  - b. Mumbai#Chennai#Kolkata#Mumbai#
  - c. Mumbai# Mumbai #Mumbai # Delhi#
  - d. Mumbai# Mumbai #Chennai # Mumbai

**Ans:- b. Mumbai#Chennai#Kolkata#Mumbai#**

SQP-2021

1. Name the built-in mathematical function / method that is used to return an absolute value of a number.

**Ans: abs()**

SQP-2020

1. Name the Python Library modules which need to be imported to invoke the following functions:

**(i) sin():- math (ii) randint ():- random**

2. What possible outputs(s) are expected to be displayed on screen at the time of execution of the program from the following code? Also specify the maximum values that can be assigned to each of the variables FROM and TO.

```
import random
AR=[20,30,40,50,60,70];
FROM=random.randint(1,3)
TO=random.randint(2,4)
for K in range(FROM,TO+1):
 print (AR[K],end="#")
```

(i) 10#40#70# (ii) 30#40#50#

(iii) 50#60#70# (iv) 40#50#70#

**Ans:- (ii) 30#40#50# Maximum value FROM,TO is 3,4)**