

RANDOM MODULE

randint() – function takes starting and ending values both

randrange()-function takes only starting value and ending-1 value

random()-generates decimal values between 0 and 1 but not include 1

<p>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.</p> <pre>import random VALUES = [10, 20, 30, 40, 50, 60, 70, 80] BEGIN = random.randint(1, 3) LAST = random.randint(2, 4) for I in range (BEGIN, LAST+1): print (VALUES[I], end = "-") (i) 30-40-50- (ii) 10-20-30-40- (iii) 30-40-50-60- (iv) 30-40-50-60-70-</pre> <p>Ans OUTPUT – (i) 30-40-50- Minimum value of BEGIN: 1 Minimum value of LAST: 2</p>	<p>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.</p> <pre>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): print (AR[K],end="#") (i)10#40#70# (ii)30#40#50# (iii)50#60#70# (iv)40#50#70#</pre> <p>Ans Maximum value of FROM = 3 Maximum value of TO = 4 (ii) 30#40#50#</p>
<p>Consider the following code:</p> <pre>import math import random print(str(int(math.pow(random.randint(2,4),2)))) print(str(int(math.pow(random.randint(2,4),2)))) print(str(int(math.pow(random.randint(2,4),2))))</pre> <p>What could be the possible outputs out of the given four choices?</p> <p>i) 2 3 4 ii) 9 4 4 iii)16 16 16 iv)2 4 9</p> <p>Ans Possible outputs : ii) , iii) randint will generate an integer between 2 to 4 which is then raised to power 2, so possible outcomes can be 4,9 or 16</p>	<p>Consider the following code and find out the possible output(s) from the options given below. Also write the least and highest value that can be generated.</p> <pre>import random as r print(10 + r.randint(10,15) , end = ' ') print(10 + r.randint(10,15) , end = ' ') print(10 + r.randint(10,15) , end = ' ') print(10 + r.randint(10,15))</pre> <p>i) 25 25 25 21 iii) 23 22 25 20 ii) 23 27 22 20 iv) 21 25 20 24</p> <p>Ans Possible outputs : i), iii) and iv) Least value : 10 Highest value : 15</p>
<p>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 BEG and END.</p>	<p>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 Lower and Upper.</p> <pre>import random</pre>

<pre>import random heights=[10,20,30,40,50] beg=random.randint(0,2) end=random.randint(2,4) for x in range(beg,end): print(heights[x],end='@') (a) 30 @ (b) 10@20@30@40@50@ (c) 20@30 (d) 40@30@</pre> <p>Ans (a) & (b) Maximum value of BEG: 2 Maximum value of END: 4</p>	<pre>AR=[20,30,40,50,60,70] Lower =random.randint(1,4) Upper =random.randint(2,5) for K in range(Lower, Upper +1): print (AR[K],end="#") (i) 10#40#70# (ii) 30#40#50# (iii) 50#60#70# (iv) 40#50#70#</pre> <p>Ans (i) ,(ii) and (iii)</p>
<p>What possible output(s) are expected to be displayed on screen at the time of execution of the program from the following code? Import random</p> <pre>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="#")</pre> <p>(i) 10#40#70# (iii) 50#60#70# (ii) 30#40#50# (iv) 40#50#70#</p> <p>Ans (ii) 30#40#50#</p>	<p>What possible outputs(s) are expected to be displayed on screen at the time of execution of the program from the following code. Select which option/s is/are correct</p> <pre>import random print(random.randint(15,25) , end=' ') print((100) + random.randint(15,25) , end = ' ') print((100) -random.randint(15,25) , end = ' ') print((100) *random.randint(15,25))</pre> <p>(i) 15 122 84 2500 (ii) 21 120 76 1500 (iii) 105 107 105 1800 (iv) 110 105 105 1900</p> <p>Ans (i) (ii) are correct answers.</p>
<p>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 minimum and maximum values that can be assigned to the variable End .</p> <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> <p>(i) INDIGO&BLUE&GREEN& (ii) VIOLET&INDIGO&BLUE& (iii) BLUE&GREEN&YELLOW& (iv) GREEN&YELLOW&ORANGE&</p> <p>Ans (i) INDIGO&BLUE&GREEN&</p>	<p>What possible outputs(s) are expected to be displayed on screen at the time of execution of the program from the following code?</p> <pre>import random X= random.random() Y= random.randint(0,4) print(int(),".",Y+int(X))</pre> <p>(i) 0:5 (ii) 0:3 (iii) 0:0 (iv) 2:5</p> <p>Ans (ii) and (iii)</p>

<p>Minimum Value of End = 3</p> <p>Maximum Value of End = 4</p> <pre>import random x=random.random() y=random.randint(0,4) print(int(x),":",y+int(x))</pre> <p>Choose the possible output(s) from the given options. Also write the least and highest value that may be generated.</p> <p>(i) 0:0 ii.) 1:6 iii.) 2:4 iv.) 0:3</p> <p>Ans min value of x 0.01 and max value will be 0.99899</p> <p>Min value of y 0 and max value will be 4</p> <p>Corrected options will be (i) and (iv)</p>	<p>(e) Observe the following Python code and find out which of the given options (i) to (iv) are the expected correct output(s). Also, assign maximum and minimum values that can be assigned to the variable 'Go'.</p> <pre>import random X=[100,75,10,125] Go =random.randint(0,3) for i in range(Go): print(X[i],"\$\$")</pre> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: center;">(i) 100\$\$ 75\$\$ 10\$\$</td><td style="width: 50%; text-align: center;">(ii) 100\$\$ 99\$\$</td></tr> <tr> <td style="text-align: center;">(ii) 150\$\$ 100\$\$</td><td style="text-align: center;">(iv) 125\$\$ 10\$\$</td></tr> </table> <p>Ans</p> <p style="color: red;">(i) 100 \$\$ 75\$\$ 10\$\$</p>	(i) 100\$\$ 75\$\$ 10\$\$	(ii) 100\$\$ 99\$\$	(ii) 150\$\$ 100\$\$	(iv) 125\$\$ 10\$\$
(i) 100\$\$ 75\$\$ 10\$\$	(ii) 100\$\$ 99\$\$				
(ii) 150\$\$ 100\$\$	(iv) 125\$\$ 10\$\$				
<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=" ")</pre> <p>Ans</p> <p style="color: red;">delhi mumbai chennai Kolkata</p> <p>delhi delhi mumbai mumbai chennai chennai kolkata kolkata</p>	<pre>import random p='my program' i=0 while p[i]!='y': t=random.randint(0,3)+5 print(p[t],'-') i=i+1</pre> <p>Ans</p> <p style="color: red;">g -O- r- a-</p> <p>order can vary but print only these 4 characters</p>				
<pre>import random sel=random.randint(0,3) animal=["deer","monkey","cow","kangaroo"] for a in animal: for aa in range(1,sel): print(a, end="") print()</pre> <p>Ans</p> <p style="color: red;">deer</p>	<pre>import random picker=random.randint(0,3) color=["blue","pink","green","red"] for i in color: for j in range(1,picker): print(i, end="") print()</pre> <p>Ans</p> <p style="color: red;">blue</p>				

monkey	pink
cow	green
kangaroo	red
 or	 or
deer	blue
deer	blue
monkey	pink
monkey	pink
cow	green
cow	green
kangaroo	red
kangaroo	red

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 first, second and third.

```
from random import randint
LST=[5,10,15,20,25,30,35,40,45,50,60,70]
first = randint(3,8)
second = randint(4,9)
third = randint(6,11)
print(LST[first],"#", LST[second],"#", LST[third],"#")
(i) 20#25#25# (ii) 30#40#70# (iii) 15#60#70# (iv) 35#40#60#
```

Ans 35#40#60#

Maximum Values: First: 40, Second: 45, Third: 60