

## 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 = "-")</pre> <p>(i) 30-40-50- (ii) 10-20-30-40- (iii) 30-40-50-60- (iv) 30-40-50-60-70-</p> <p><b>Ans</b> <b>OUTPUT – (i) 30-40-50-</b> <b>Minimum value of BEGIN: 1</b> <b>Minimum value of LAST: 2</b></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="##")</pre> <p>(i)10#40#70# (ii)30#40#50# (iii)50#60#70# (iv)40#50#70#</p> <p><b>Ans</b> <b>Maximum value of FROM = 3</b> <b>Maximum value of TO = 4</b> <b>(ii) 30#40#50#</b></p>
<p>Consider the following code: import math import random</p> <pre>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><b>Ans</b> <b>Possible outputs : ii) , iii)</b> <b>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</b></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><b>Ans</b> <b>Possible outputs : i), iii) and iv)</b> <b>Least value : 10</b> <b>Highest value : 15</b></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='@')</pre> <p>(a) 30 @            (b) 10@20@30@40@50@ (c) 20@30            (d) 40@30@</p> <p><b>Ans</b> <b>(a) &amp; (b)</b> <b>Maximum value of BEG: 2</b> <b>Maximum value of END: 4</b></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="##")</pre> <p>(i) 10#40#70#            (ii) 30#40#50# (iii) 50#60#70#        (iv) 40#50#70#</p> <p><b>Ans (i) ,(ii) and (iii)</b></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><b>Ans</b> <b>(ii) 30#40#50#</b></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><b>Ans</b> <b>(i) (ii) are correct answers.</b></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="&amp;")</pre> <p>(i) INDIGO&amp;BLUE&amp;GREEN&amp; (ii) VIOLET&amp;INDIGO&amp;BLUE&amp; (iii) BLUE&amp;GREEN&amp;YELLOW&amp; (iv) GREEN&amp;YELLOW&amp;ORANGE&amp;</p> <p><b>Ans</b> <b>(i) INDIGO&amp;BLUE&amp;GREEN&amp;</b></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><b>Ans</b> <b>(ii) and (iii)</b></p>



<p> <b>monkey</b>  <b>cow</b>  <b>kangaroo</b> </p> <p> <b>or</b> </p> <p> <b>deer</b>  <b>deer</b>  <b>monkey</b>  <b>monkey</b>  <b>cow</b>  <b>cow</b>  <b>kangaroo</b>  <b>kangaroo</b> </p>	<p> <b>pink</b>  <b>green</b>  <b>red</b> </p> <p> <b>or</b> </p> <p> <b>blue</b>  <b>blue</b>  <b>pink</b>  <b>pink</b>  <b>green</b>  <b>green</b>  <b>red</b>  <b>red</b> </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 first, second and third.         </p> <pre> 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],"#") </pre> <p>           (i) 20#25#25#      (ii) 30#40#70#      (iii) 15#60#70#      (iv) 35#40#60#         </p> <p> <b>Ans 35#40#60#</b>  <b>Maximum Values: First: 40, Second: 45, Third: 60</b> </p>	