Assignment 0

The due date for submitting this assignment has passed.

Due on 2021-01-25, 23:59 IST.

Assignment submitted on 2021-01-20, 19:49 IST

Note : This assignment is only for practice purpose and it will not be counted towards the Final score

1) What are the prime factors of the number 124 ***1 point***

- 2,62
- (•) 2,31
- 1,124
- None of the above

Yes, the answer is correct.
Score: 1
Accepted Answers:
2,31

2) What is the Lowest Common multiple of 5,15 ***1 point***

- 5
- 10
- (•) 15
- 20

Yes, the answer is correct.
Score: 1
Accepted Answers:
15

3) A car traveled 281 km in 4 hours 41 minutes. What was the average speed of the car in km per minute? ***1 point***

- (•) 1
- 2
- 3
- 4

Yes, the answer is correct.
Score: 1
Accepted Answers:
1

4) The length of a rectangle is four times its width. If the area is $100m^2$ what is the width of the rectangle? ***1 point***

- 10
- (•) 5
- 4
- 6

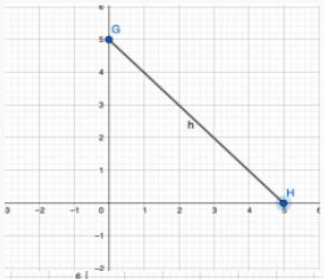
Yes, the answer is correct.
Score: 1
Accepted Answers:
5

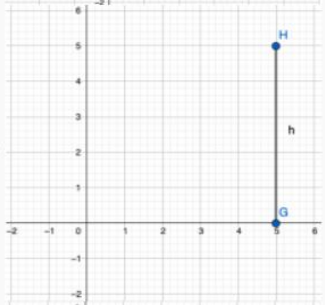
5) The length of a rectangle is increased to 2 times its original size and its width is increased to 3 times its original size. If the area of the new rectangle is equal to 1800 square meters, what is the area of the original rectangle? ***1 point***

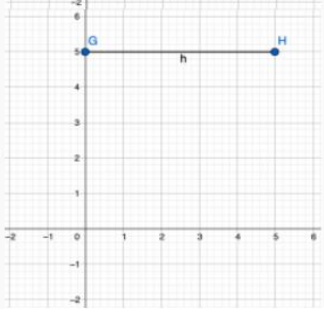
- 1200 square meters
- Remains same
- (•) 300 square meters
- 200 square meters

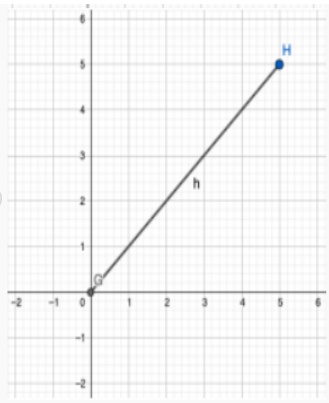
Yes, the answer is correct.
Score: 1
Accepted Answers:
300 square meters

6) Water is being pumped out , at a constant rate, from an underground storage tank that has a height 5 Meters. Which of the graphs below best represent the changes in the height of water in the tank as a function of the time (X axis - Time, Y axis - Height)? ***1 point***



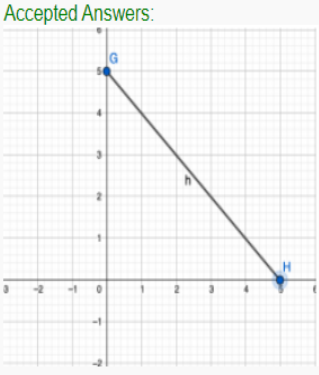




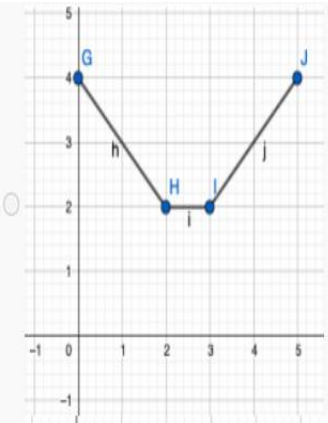


Yes, the answer is correct.
Score: 1

Accepted Answers:



7) Rama drove at a constant speed for 2 hours. He then stopped for an hour to do some shopping and have a rest and then drove back home driving at a constant speed. Which graph best represents the changes in the distance from home as Rama was driving (X axis - Time, Y axis - Distance)? ***1 point***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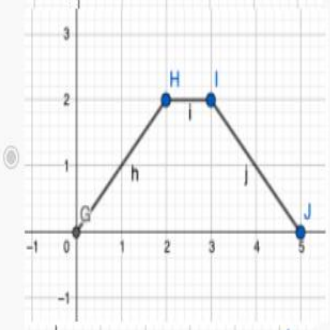
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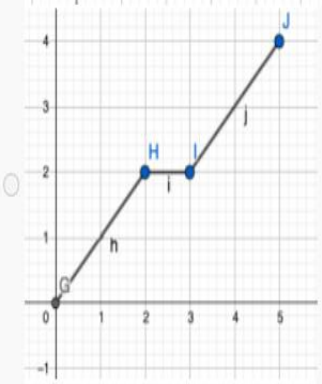
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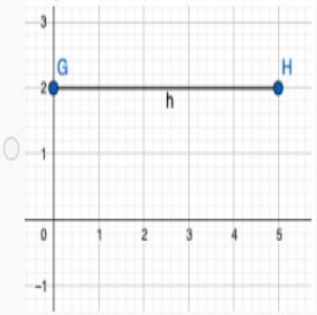
G
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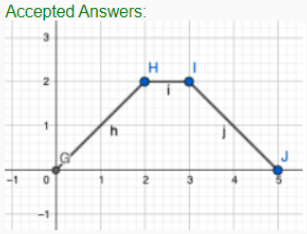
h

Yes, the answer is correct.
Score: 1

Accepted Answers:



8) In a certain college, 40% of a class are taking Physics, 30% are taking calculus and 10% are taking both. If 40 students are enrolled in the class, how many students are taking neither Physics nor calculus? ***1 point***

- 12
- 4
- 8
- 16

Yes, the answer is correct.
Score: 1

Accepted Answers:
16

9) The circumference of a circle inscribed inside a square with a side of 20 meters. ***1 point***

- 10π
- $10\sqrt{2}\pi$
- 20π
- $20\sqrt{2}\pi$

Yes, the answer is correct.
Score: 1

Accepted Answers:
20π

10) Two different schools (A and B) have the same number of pupils. The ratio of the boys in school A and the boys in school B is 2:1 and the ratio of the girls in school A and the girls in school B is 4:5. Find the ratio of the boys in school A to the girls in school A. ***1 point***

- 1:4
- 1:5
- 2:5
- 1:2

Yes, the answer is correct.
Score: 1

Accepted Answers:
1:2

Assignment 1

The due date for submitting this assignment has passed.

Due on 2021-02-03, 23:59 IST.

Assignment submitted on 2021-01-19, 20:30 IST

1) A function calling itself with a smaller instance is called as_____ ***1 point***

- (•) Recursion
- ( ) Self-calling function
- ( ) Iteration
- ( ) Smaller instance function

Yes, the answer is correct.
Score: 1

Accepted Answers:
Recursion

2) _____ option in Scratch is used to wait between the commands ***1 point***

- ( ) Events
- (•) Control
- ( ) Sensing
- ( ) Operators

Yes, the answer is correct.
Score: 1

Accepted Answers:
Control

3) Which of the following is the extension for a scratch file? ***1 point***

- ( ) sf
- ( ) sh
- ( ) sc
- (•) sb

Yes, the answer is correct.
Score: 1

Accepted Answers:
sb

4) The command to make sprite walk by certain steps is *1 point*

- walk
- move
- ahead
- forward

Yes, the answer is correct.
Score: 1

Accepted Answers:
move

5) What is the action of *next-costume* command on sprite in Scratch? *1 point*

- Changes color of sprite
- Changes style of sprite
- Moves sprite to different position
- Shows animation of sprite

Yes, the answer is correct.
Score: 1

Accepted Answers:
Changes style of sprite

6) What is the output of the following *1 point*

- 0
- 100
- 80
- 20

Yes, the answer is correct.
Score: 1

Accepted Answers:
80

7) Which of the following is not a control command in Scratch? ***1 point***

- repeat
- repeat until
- forever
- forever until

Yes, the answer is correct.
Score: 1
Accepted Answers:
forever until

8) What one iteration of the following block of instructions represent? ***1 point***

- Sprite going vertically up by 10 steps
- Sprite going backward by 10 steps
- Sprite going forward by 10
- Sprite remains in its place

Yes, the answer is correct.
Score: 1
Accepted Answers:
Sprite going backward by 10 steps

9) The command used to make the Sprite disappear from the animation stage is ***1 point***

- Show
- Vanish
- Hide
- Disappear

Yes, the answer is correct.
Score: 1
Accepted Answers:
Hide

10) What is the output of the following code? ***1 point***

- Multiplication table of 2
- Power of 2
- Factorial of x
- None of the above

Yes, the answer is correct.
Score: 1
Accepted Answers:
Multiplication table of 2

Assignment 2

The due date for submitting this assignment has passed.

Due on 2021-02-07, 23:59 IST.

Assignment submitted on 2021-01-26, 13:08 IST

1) When we save a Python code it will be saved as file name with the extension? ***1 point***

- .p
- .pyt
- .python
- .py

Yes, the answer is correct.
Score: 1

Accepted Answers:
.py

2) You are calculating the simple interest using a python program. How do you get the interest as an input from the user? ***1 point***

- r=float(input("Enter the interest rate"))
- r=int(input("Enter the interest rate"))
- r=input("Enter the interest rate")
- None of these

Yes, the answer is correct.
Score: 1

Accepted Answers:
r=float(input("Enter the interest rate"))

3) Consider that you are developing a 2 player game in python. You have taken the names of both the users and stored them as variables user1 and user2. ***1 point***

If you want to say Hi to both the users, print their names and welcome them to your game, which of the following statement(s) will fit to your requirement?

- print("Hi"+user1+"and"+user2+"Welcome to the game")
- print("Hi",user1,"and",user2,"Welcome to the game")
- print("Hi","user1","and","user2","Welcome to the game")
- print("Hi"+user1,"and",user2+"Welcome to the game")

Yes, the answer is correct.
Score: 1

Accepted Answers:
print("Hi"+user1+"and"+user2+"Welcome to the game")
print("Hi",user1,"and",user2,"Welcome to the game")

print("Hi"+user1,"and",user2+"Welcome to the game")

4) What is the output of this code snippet ? ***1 point***

```
a=3
b=3.0
if(a==b):
  print("numbers are equal")
else:
  print("numbers are not equal")
```

- numbers are equal
- numbers are not equal

Yes, the answer is correct.
Score: 1

Accepted Answers:
numbers are equal

5) What does the following code snippet print? ***1 point***

```
for i in range(0,20,2):
  print(i)
```

- All numbers from 0 to 19
- Pair of numbers from 0 to 19 whose difference is 2
- All even numbers from 0 to 19
- All odd numbers from 0 to 19

Yes, the answer is correct.
Score: 1

Accepted Answers:
All even numbers from 0 to 19

6) What is the output of the code snippet given? ***1 point***

```
a=10
b=100%90
print(a,b)
```

- 10 100
- 10 90
- An error will be generated
- 10 10

Yes, the answer is correct.
Score: 1

Accepted Answers:
10 10

7) Given this code snippet, determine its output? ***1 point***

```
a=1
for i in range(1,7):
  a=a*(i+1)
print(a)
```

- (•) 5040
- ( ) 4050
- ( ) 504
- ( ) 405

Yes, the answer is correct.
Score: 1

Accepted Answers:
5040

8) Consider the code snippet given, describe its output? ***1 point***

```
a=int(input("enter the number"))
for i in range(1,7):
  print(a+i)
```

- ( ) Some 7 numbers
- ( ) First 6 natural numbers
- (•) Next 6 Numbers after the input number a
- ( ) Next 7 Numbers after the input number a

Yes, the answer is correct.
Score: 1

Accepted Answers:
Next 6 Numbers after the input number a

9) Consider the code snippet given, What might be the output of this? ***1 point***

```
a=8
while(a>1):
  a=a-1
  print(a)
```

- (•) Decreasing order of natural numbers from 7
- ( ) Decreasing order of natural numbers from 8
- ( ) Increasing order of natural numbers till 7
- ( ) Increasing order of natural numbers till 8

Yes, the answer is correct.
Score: 1

Accepted Answers:
Decreasing order of natural numbers from 7

10) Which of the following is not a valid variable name? ***0 points***

- ( ) var-1
- ( ) var1
- ( ) Var1
- (•) var 1

No, the answer is incorrect.
Score: 0

Accepted Answers:
var-1

Assignment 3

The due date for submitting this assignment has passed.

Due on 2021-02-10, 23:59 IST.

Assignment submitted on 2021-02-02, 18:34 IST

1) What is the output of the following code? *1 point*

```
course_list = ["Science","Maths","English"]
for course in course_list:
    print(course)
```

- Science
Maths
English
- ['Science', 'Maths', 'English']
- 0
1
2
- ["Science","Maths", "English"]

Yes, the answer is correct.
Score: 1

Accepted Answers:

Science
Maths
English

2) Consider the list L= [0, 1, 1, 2, 3, 5, 8, 13, 21, 34].What will be output of the statement L [3:6]? ***1 point***

- (●) [2, 3, 5]
- ( ) [0, 1, 1]
- ( ) [1, 2, 3]
- ( ) none

Yes, the answer is correct.
Score: 1
Accepted Answers:
[2, 3, 5]

3) Which of the following is the method to insert an item into a specified position in a list? ***1 point***

- ( ) Append
- (●) Insert
- ( ) Add
- ( ) InsertAt

Yes, the answer is correct.
Score: 1
Accepted Answers:
Insert

4) _____ method returns the number of occurrences of an element in a list. ***1 point***

- ( ) NumberOf
- ( ) Total
- (●) Count
- ( ) Length

Yes, the answer is correct.
Score: 1
Accepted Answers:
Count

5) In the game FizzBuzz, what should be the output for the number 510? ***1 point***

- ( ) Fizz
- ( ) Buzz
- (●) FizzBuzz
- ( ) Either A or B

Yes, the answer is correct.
Score: 1
Accepted Answers:

FizzBuzz

6) Which of the following trims the list L by 10% **1 p**

- Stats.trim_mean(L, 10)
- Stats.trim_mean(L, 0.1)
- Stats.trim_mean(L, -10)
- Stats.trim_mean(L, -0.1)

Yes, the answer is correct.
Score: 1
Accepted Answers:
Stats.trim_mean(L, 0.1)

7) Which of the following code is invalid? **1 p**

-
```
import matplotlib.pyplot as plt
plt.plot([1,2,3,4],[1,3,6,9],'b+')
```
-
```
import matplotlib.pyplot as plt
plt.plot([1,2,3,4],[1,3,6,9],'b++')
```
-
```
import matplotlib.pyplot as plt
plt.plot([1,2,3,4],[1,3,6,9],'b*')
```
-
```
import matplotlib.pyplot as plt
plt.plot([1,2,3,4],[1,3,6,9],'b--')
```

Yes, the answer is correct.
Score: 1
Accepted Answers:
import matplotlib.pyplot as plt
plt.plot([1,2,3,4],[1,3,6,9],'b++')

8) In how many different ways can you arrange the letters in the word COMP? **1 p**

- 24
- 4
- 6
- 20

Yes, the answer is correct.
Score: 1
Accepted Answers:
24

---

9) The method open("file1.txt", r+) opens the file file1.txt in **1 point**

- Read mode
- Write mode
- Read write mode
- Append mode

Yes, the answer is correct.
Score: 1
Accepted Answers:
Read write mode

10) The function random.randint(1,100) in python generates **1 point**

- A random integer between 1 to 100 with 1 and 100 both inclusive
- A random integer between 1 to 100 with 1 and 100 both exclusive
- A random integer between 1 to 100 with only 100 inclusive
- None of the above

Yes, the answer is correct.
Score: 1
Accepted Answers:
A random integer between 1 to 100 with 1 and 100 both inclusive

Assignment 4

The due date for submitting this assignment has passed.

Due on 2021-02-17, 23:59 IST.

Assignment submitted on 2021-02-15, 13:00 IST

1) A magic square is an n ×n matrix in which *1 point*

- Sum of numbers in each row is same
- Sum of numbers in each column is same
- Sum of numbers in each diagonal is same
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
All of the above

2) For any magic square of n × n, the magic number M is given by *1 point*

- n (n^2 + 1) / 2
- n (n + 1) / 2
- (n^2 + 1) / 2
- (n + 1) / 2

Yes, the answer is correct.
Score: 1

Accepted Answers:
n (n^2 + 1) / 2

3) Assuming that num is always a 2-digit number, what is the output of the following code? *1 point*

```
num = int(input())
temp = num
x = len(str(num))
z = 0
while temp > 0:
    y = temp % 10
    z += y ** x
    temp //= 10
if num == z:
    print(num)
```

- Prints the number if the sum of squares of its digits is the number itself
- Prints the number if the sum its digits is the number itself
- Prints the number if the product of its digits is the number itself
- Prints nothing

No, the answer is incorrect.
Score: 0

Accepted Answers:
Prints the number if the sum of squares of its digits is the number itself

4) In a double game each pair of cards will have **1 point**

- Only two symbols in common
- Only one symbol in common
- All symbols in common
- No symbols in common

Yes, the answer is correct.
Score: 1

Accepted Answers:
Only one symbol in common

5) The minimum number of people required to guarantee that at least two people will have their birthdays falling on the same day of a non-leap year is **1 point**

- 365
- 364
- 366
- 367

Yes, the answer is correct.
Score: 1

Accepted Answers:
366

6) What does the following code snippet in python compute? **1 point**

```
num = int(input())
for i in range(1, 11):
    print(num*i)
```

- Factorial of num
- Multiplication table of num
- Powers of num
- None

Yes, the answer is correct.
Score: 1

Accepted Answers:
Multiplication table of num

7) Which of the following will print all prime numbers in an interval? ***1 point***

```
lower = int(input())
upper = int(input())
for num in range(lower, upper + 1):
    if num>1:
        for i in range (2,num):
            if(num % i) == 0:
                break
        else:
            print(num)
```

```
for num in range(lower, upper + 1):
    if num > 1:
        for i in range(2, num):
            if (num % i) != 0:
                print(num)
```

```
for num in range(lower, upper + 1):
    if num > 1:
        for i in range(2, num):
            if (num % i) == 0:
                continue
            else:
                print(num)
```

```
for num in range(lower, upper + 1):
    if num > 1:
        for i in range(2, num):
            if (num % i) != 0:
                break
            else:
                print(num)
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
lower = int(input())
upper = int(input())
for num in range(lower, upper + 1):
    if num>1:
        for i in range (2,num):
            if(num % i) == 0:
                break
        else:
            print(num)
```

8) Which of the following method in python choses a movie from the list of movie names given below? ***1 point***

movies =["zindagi" , " chinatown " , "darr" , " 3idiots " , "sixthsense" , "speed" , "avtaar"]

- random.random(movies)
- random.choice(movies)
- random.select(movies)
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
random.choice(movies)

9) In "*Guess the Movie Name*" game, at-most how many guesses do you need to make for a five lettered movie name with all distinct letters in it? ***0 points***

- 53,130
- 6,37,5600
- 120
- 5

No, the answer is incorrect.
Score: 0

Accepted Answers:
53,130

10) In "*Guess the movie name*" game, if the player asks to open up a letter that is not present in the actual movie name then the closest letter that precedes this requested letter in the alphabetical order and present in the actual movie name is opened up. ***1 point***

- True
- False

Yes, the answer is correct.
Score: 1

Accepted Answers:
False

Assignment 5

The due date for submitting this assignment has passed.

Due on 2021-02-24, 23:59 IST.

Assignment submitted on 2021-02-23, 21:52 IST

1) Let marks scored be a dictionary of the items given below: ***1 point***

```
marks_scored = { }
marks_scored['maths']= 80
marks_scored['science']=90
marks_scored['english']=85
marks_scored['social']=95
```

Which of the following operation will print the items of the dictionary?

- (•) marks_scored.items()
- ( ) marks_scored.keys()
- ( ) marks_scored.values()
- ( ) all of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
marks_scored.items()

2) Which of the following operation on the dictionary **marks_scored** in Question 1 will remove a specified key and return the corresponding value? ***1 point***

- ( ) marks_scored.remove
- ( ) marks_scored.del
- (•) marks_scored.pop
- ( ) marks_scored.popitem

Yes, the answer is correct.
Score: 1

Accepted Answers:
marks_scored.pop

3) Speech recognition does not work on **.wav** extension files ***1 point***

- ( ) True
- (•) False

Yes, the answer is correct.
Score: 1

Accepted Answers:
False

4) What are the items in the following dictionary : **1 point**

```
Dictionary = {x: x*x for x in range(11) if x % 2 == 0 }
print(Dictionary)
```

- Dictionary of odd numbers and their squares
- Dictionary of even numbers and their squares
- dictionary of numbers divisible by 2
- non of the above

Yes, the answer is correct.
Score: 1
Accepted Answers:
Dictionary of even numbers and their squares

5) In the game **"Rock, Paper and Scissor"**, if player one enters 456 and player two enters 684 with their secret bits 0 and 2 respectively, then the expected outcome of the game would be _____ **1 point**

- Player one wins
- Player two wins
- draw
- insufficient data

Yes, the answer is correct.
Score: 1
Accepted Answers:
Player one wins

6) What is the output of the following code: **1 point**

```
students = {'Ajay':{'sem':'3',
        'roll_no':1, 'total_marks':85},
        'Shwetha':{'sem':'3',
        'roll_no':2, 'total_marks':90}}
for a in students:
    print(a)
    for b in students[a]:
        print (b,':',students[a][b])
```

Ajay
sem : 3
roll_no : 1
total_marks : 85
Shwetha
sem : 3
roll_no : 2
total_marks : 90

Ajay, sem : 3,roll_no : 1, total_marks : 85
Shwetha, sem : 3, roll_no : 2, total_marks : 90

{ Ajay, sem : 3,roll_no : 1, total_marks : 85 , Shwetha, sem : 3,
roll_no : 2, total_marks : 90 }

none of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
Ajay
sem : 3
roll_no : 1
total_marks : 85
Shwetha
sem : 3
roll_no : 2
total_marks : 90

7) Binary search can be applied on any list of random elements **1 point**

True

False

Yes, the answer is correct.
Score: 1

Accepted Answers:
False

8) Which of the following is true about bubble sort? **1 point**

In each iteration the first element in unsorted list is compared with the remaining elements

The algorithm stops when the list is already sorted

In each iteration every consecutive pairs of the unsorted list are compared

There is swapping of elements in each comparison made

Accepted Answers:
In each iteration every consecutive pairs of the unsorted list are compared

9) Which are the given statements precisely explains the action of the given code? **1 point**

```
import random
roll_the_dice = "y"
while roll_the_dice== "y" or x+y==12:
    print ("Rolling the dices...")
    print ("The values are....")
    x = random.randint(1, 6)
    print (x)
    y = random.randint(1, 6)
    print (y)
    roll_the_dice = input("Do you want to roll the dices?")
```

- rolls the dices as long as the input is 'y'
- rolls the dices until the sum of their face values is 12
- rolls the dices as long as the input is 'y' or the sum of their face values is 12
- rolls the dices infinitely

Yes, the answer is correct.
Score: 1

Accepted Answers:
rolls the dices as long as the input is 'y' or the sum of their face values is 12

10) What will be the output of the following code? **1 point**

```
some_list = {'abc':10, 'xyz':3, 'pqr':2}
s = ''
for i in some_list:
    s = s + str(some_list[i]) + ' '
    s1 = s[:-1]
print(s1[::-1])
```

- 3 2
- 2 3
- 2 3 01
- 01 3 2

Yes, the answer is correct.
Score: 1

Assignment 6

The due date for submitting this assignment has passed.

Due on 2021-03-03, 23:59 IST.

Assignment submitted on 2021-02-24, 20:16 IST

1) In Caesar cipher, the mediator needs to make maximum of how many trails to break the code? ***1 point***

- 1
- 26
- no trail needed
- 10

Yes, the answer is correct.
Score: 1

Accepted Answers:
26

2) What is the result of the following code if the input is COMPUTING? ***1 point***

```
result = ""
text = input()
shift = 4
for i in range(len(text)):
    char = text[i]
    if (char.isupper()):
        result += chr((ord(char) + shift-65) % 26 + 65)

    else:
        result += chr((ord(char) + shift - 97) % 26 + 97)
```

- FRPSXWLQJ
- HTRUZYNSL
- GSQTYXMRK
- none of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
GSQTYXMRK

3) Which of the following is TRUE about MIN-MAX strategy? **1 point**

- (●) Maximise the chances of your winning and minimize the changes of the opponent winning
- ( ) The game with min-max strategy can never be drawn
- ( ) minimise the chances of your winning and maximize the chances of the opponent winning
- ( ) All the above are true

Yes, the answer is correct.
Score: 1
Accepted Answers:
Maximise the chances of your winning and minimize the changes of the opponent winning

4) What is the output of the following code? **1 point**

```
num1 = int(input())
num2 = int(input())
i = 1
while(i <= num1 and i <= num2):
    if(num1 % i == 0 and num2 % i == 0):
        output = i
    i = i + 1
```

- (●) Greatest common factor of num1 and num2
- ( ) Least common factor of num1 and num2
- ( ) Least common multiple of num1 and num2
- ( ) Greatest common multiple of num1 and num2

Yes, the answer is correct.
Score: 1
Accepted Answers:
Greatest common factor of num1 and num2

5) What does the following python code compute? **1 point**

```
def xyz(a, b):
    if a == 0 or b == 0:
        return 0
    if b == 1:
        return a
    if a == 1:
        return b
    return a + xyz(a, b - 1)
```

- ( ) power of a raised to b
- ( ) sum of a and b
- (●) product of a and b
- ( ) none of the above

Yes, the answer is correct.
Score: 1
Accepted Answers:
product of a and b

6) Which of the following is not true about recursion? **1 point**

- ( ) The speed of a program using recursion is same as that of the speed of its non-recursive equivalent
- ( ) The speed of a program using recursion is slower than the speed of its non-recursive equivalent
- (●) The speed of a program using recursion is faster than the speed of its non-recursive equivalent
- ( ) Recursive programs are easier to understand and code than that of its non-recursive equivalent

Yes, the answer is correct.
Score: 1
Accepted Answers:
The speed of a program using recursion is faster than the speed of its non-recursive equivalent

7) Which of the following is the optimal code among the given codes using recursive binary search?

```
def binary_search(arr, low, high, x):
    if high >= low:
        mid = (high + low) // 2
        if arr[mid] == x:
            return mid
        elif arr[mid] > x:
            return binary_search(arr, mid + 1, high, x)
        else:
            return binary_search(arr, low, mid - 1, x)
    else:
        return -1
```

```
def binary_search(arr, low, high, x):
    if high >= low:
        mid = (high + low) // 2
        if arr[mid] == x:
            return mid
        elif arr[mid] > x:
            return binary_search(arr, low, mid - 1, x)
        else:
            return binary_search(arr, mid + 1, high, x)
    else:
        return -1
```

```
def binary_search(arr, low, high, x):
    if high >= low:
        mid = (high + low) // 2
        if arr[mid] == x:
            return mid
        elif arr[mid] > x:
            return binary_search(arr, mid + 1, high, x)
        else:
            return binary_search(arr, low, mid - 1, x)
```

```
def binary_search(arr, low, high, x):
    if high >= low:
        mid = (high + low) // 2
        if arr[mid] == x:
            return mid
        if arr[mid] > x:
            return binary_search(arr, low, mid, x)
        else:
            return binary_search(arr, mid, high, x)
    else:
        return -1
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
def binary_search(arr, low, high, x):
    if high >= low:
        mid = (high + low) // 2
        if arr[mid] == x:
            return mid
        elif arr[mid] > x:
            return binary_search(arr, low, mid - 1, x)
        else:
            return binary_search(arr, mid + 1, high, x)
    else:
        return -1
```

8) What is the result of the following recursive function call? ***1 point***

```
def rfun(n):
    if(n>1):
        result =  n * rfun(n-1)
        print(result)
    else:
        result = 1
    return result
rfun(4)
```

- 2
  6
  24
- 1
  2
  6
  24
- 2
  4
  12
- 1
  2
  4
  12

Yes, the answer is correct.
Score: 1

Accepted Answers:

2
6
24

9) What is the output of the following python code?

```
def abc(num):
    return num * abc(num-1)

print(abc(4))
```

- 24
- Runs infinitely
- Recursion error
- 1

Yes, the answer is correct.
Score: 1

Accepted Answers:
Recursion error

10) A program can be written using recursive function only if it can be recursively defined.

- TRUE
- FALSE

No, the answer is incorrect.
Score: 0

Accepted Answers:
FALSE

Assignment 7

The due date for submitting this assignment has passed.

Due on 2021-03-10, 23:59 IST.

Assignment submitted on 2021-03-04, 21:56 IST

1) Which of the following is/are uses of functions? ***1 point***

- Gives higher level overview of the task to be performed
- Reusability- use same functionality at various places
- Better understanding of the code
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
All of the above

2) In Snakes and Ladders game the least number of times a player has to roll a die with the following ladder positions is _____ ***1 point***

ladders = { 3: 20, 6: 14, 11: 28, 15: 34, 17: 74, 22: 37, 38: 59, 49: 67, 57: 76, 61: 78, 73: 86, 81: 98, 88: 91 }

- 4
- 5
- 6
- 7

Yes, the answer is correct.
Score: 1

Accepted Answers:
5

3) Which of the following is the end point of the game **Snakes and Ladder?** ***1 point***

- A player has reached the end point
- A player quits the game
- both A and B are the possibilities of the game to end
- None of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
both A and B are the possibilities of the game to end

4) What is the output of the following spiralprint python function? ***1 point***

```
def spiralprint(m, n, spiralmatrix):
    k = 0
    l = 0
    while (k < m and l < n):
        for i in range(l, n):
            print(spiralmatrix[k][i], end=" ")
        k += 1
        for i in range(k, m):
            print(spiralmatrix[i][n - 1], end=" ")
        n -= 1
        if (k < m):
            for i in range(n - 1, (l - 1), -1):
                print(spiralmatrix[m - 1][i], end=" ")
            m -= 2
        if (l < n):
            for i in range(m - 1, k - 1, -1):
                print(spiralmatrix[i][l], end=" ")
            l += 2
spiralmatrix = [[1, 2, 3, 4, 5, 6],
     [7, 8, 9, 10, 11, 12],
     [13, 14, 15, 16, 17, 18]]

rows = 3
cols = 6
spiralprint(rows, cols, spiralmatrix)
```

- 1 2 3 4 5 6 12 18 17 16 15 14 13 7 8 9 10 11
- 1 2 3 4 5 6 12 18 17 16 15 14 13
- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
- 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Yes, the answer is correct.
Score: 1
Accepted Answers:
1 2 3 4 5 6 12 18 17 16 15 14 13

5) Which of the following code snippet will draw a star?

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(90)
    my_pen.forward(70)
    my_pen.right(90)
turtle.done()
```

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(144)
    my_pen.forward(50)
    my_pen.right(144)
turtle.done()
```

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(90)
    my_pen.forward(50)
    my_pen.right(90)
turtle.done()
```

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.right(60)
    my_pen.forward(60)
    my_pen.right(60)
    my_pen.forward(60)
turtle.done()
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(144)
    my_pen.forward(50)
    my_pen.right(144)
turtle.done()
```

6) Which of the following code snippet will draw a Hexagon?

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(90)
    my_pen.forward(70)
    my_pen.right(90)
turtle.done()
```

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(144)
    my_pen.forward(50)
    my_pen.right(144)
turtle.done()
```

```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.forward(50)
    my_pen.right(90)
    my_pen.forward(50)
    my_pen.right(90)
turtle.done()
```

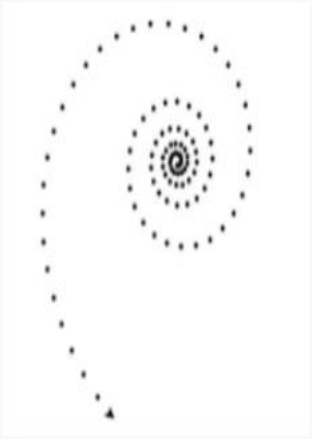
```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.right(60)
    my_pen.forward(60)
    my_pen.right(60)
    my_pen.forward(60)
turtle.done()
```

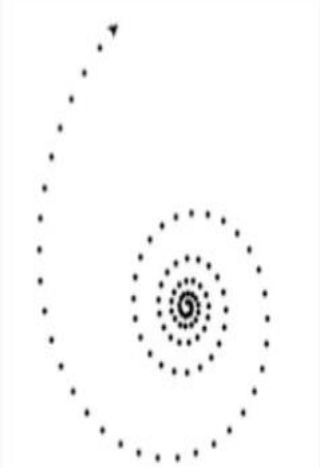
Yes, the answer is correct.
Score: 1
Accepted Answers:

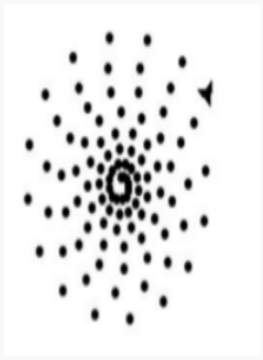
```
import turtle
my_pen = turtle.Turtle()
for i in range(3):
    my_pen.right(60)
    my_pen.forward(60)
    my_pen.right(60)
    my_pen.forward(60)
turtle.done()
```

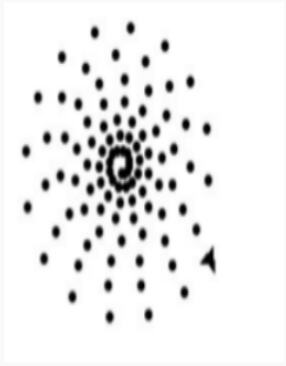
7) What is the output of the following code?

```
import turtle
a = turtle.Turtle()
for i in range(100):
    a.dot()
    a.forward(2+i/4)
    a.penup()
    a.left(30-i/4)
turtle.done()
```



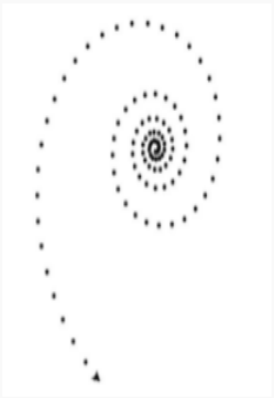






Yes, the answer is correct.
Score: 1

Accepted Answers:



8) In a file with extension csv what does csv mean? ***1 point***

- carry separated value
- common sector value
- class separated value
- comma separated value

8) In a file with extension csv what does csv mean? **1 point**

- carry separated value
- common sector value
- class separated value
- comma separated value

Yes, the answer is correct.
Score: 1

Accepted Answers:
comma separated value

9) which of the following library has to be imported to plot the route map using GPS locations in python? **1 point**

- csv
- gmplot
- both
- none

Yes, the answer is correct.
Score: 1

Accepted Answers:
both

10) Which of the following library moves the turtle backward? **1 point**

- turtle.back(distance)
- turtle.bk(distance)
- turtle.backward(distance)
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
All of the above

Assignment 8

The due date for submitting this assignment has passed.

Due on 2021-03-17, 23:59 IST.

Assignment submitted on 2021-03-15, 19:33 IST

1) Which of the following code snippet will create a tuple in python? ***1 point***

- (•) name = ('kiran','bhushan','madan')
- ( ) name = {'kiran','bhushan','madan'}
- ( ) name = ['kiran','bhushan','madan']
- ( ) All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
name = ('kiran','bhushan','madan')

2) Which of the following is not true about tuples in python? ***1 point***

- ( ) Tuple consumes less memory
- ( ) Tuples are immutable
- (•) Tuple supports item deletion
- ( ) Tuples does not support modification

Yes, the answer is correct.
Score: 1

Accepted Answers:
Tuple supports item deletion

3) What is the output of the following code snippet in python? ***1 point***

```
name =('kiran','bhushan','madan')
print (name[-1])
```

- ( ) invalid syntax
- ( ) tuple index out of range
- ( ) prints nothing
- (•) madan

Yes, the answer is correct.
Score: 1

Accepted Answers:
madan

4) What is the output of the following code?

```
import random
random_number = random.randint(1,10)
tries = 0
x = int(input())
while x != random_number:
        tries += 1
        x = int(input())
        if x == random_number:
            print("stop")
```

- (●) the program stops when the number entered matches with the random number generated
- ( ) the program stops after certain number of trials
- ( ) the program never stops
- ( ) error

Yes, the answer is correct.
Score: 1
Accepted Answers:
the program stops when the number entered matches with the random number generated

5) What does the following program plot?

```
import random
import matplotlib.pyplot as plt
rn=random.randint(0,9)
print(rn)
l=[0 for i in range(10)]
y=[]
for i in range(10):
  x=int(input())
  y.append(i)
  if x==rn:
    l[x]+=1
plt.plot(y,l)
plt.show()
```

- Plots the random number generated in each iteration
- Plots the number of times the given input matches with the random number generated
- Plots the input entered for each iteration
- none of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
Plots the number of times the given input matches with the random number generated

6) In image processing using python what is the acronym of PIL? **1 point**

- Python Interactive Library
- Pillow Library
- Python Image Library
- Python Imaging Library

Yes, the answer is correct.
Score: 1

Accepted Answers:
Python Imaging Library

7) What does the following code snippet in python compute? **1 point**

```
text1 = input()
len1 = len(text1)
text2 = input()
len2 = len(text2)
for i in range(0,len1-len2+1):
    j = 0
    while ((j < len2) and (text1[i + j] == text2[j])):
        j = j + 1
    if (j==len2):
        print(text2)
```

- checks whether the two given texts are same
- searches for text2 in text1
- finds all the occurrences of text2 in text1
- none of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
finds all the occurrences of text2 in text1

8) Which of the following code will convert the uppercase letters of the given string into lower case and prints the converted string?

```
strng = input()
out = ''
for i in strng:
    if i not in 'ABCDEFGHIJKLMNOPQRSTUVWXYZ':
        out = out + i
    else:
        j = ord(i)
        k = j + 32
        out = out + chr(k)
print(out)
```

```
strng = input ()
out = ''
for i in strng:
    if ord (i) >= 65 and ord(i) <= 90:
        j = ord(i) + 32
        k = chr (j)
        out = out + k
print(out)
```

both A and B

none

No, the answer is incorrect.
Score: 0

Accepted Answers:

```
strng = input()
out = ''
for i in strng:
    if i not in 'ABCDEFGHIJKLMNOPQRSTUVWXYZ':
        out = out + i
    else:
```

```
        j = ord(i)
        k = j + 32
        out = out + chr(k)
print(out)
```

9) Which of the following is the platform for building Python programs to work with sentiment analysis of human language data? *1 point*

- NLTK: Neutral Language Toolkit
- NLTK: Natural Language Toolkit
- NLTK: Normal Language Toolkit
- NLTK: Natural Lingual Toolkit

Yes, the answer is correct.
Score: 1
Accepted Answers:
NLTK: Natural Language Toolkit

10) Sentiment analysis involves working with whether _____ *1 point*

- a piece of information is biased or unbiased
- a piece of information is useful or not
- a piece of information is true or false
- a piece of information is positive or negative

Yes, the answer is correct.
Score: 1
Accepted Answers:
a piece of information is positive or negative

Assignment 9

The due date for submitting this assignment has passed.

Due on 2021-03-24, 23:59 IST.

Assignment submitted on 2021-03-17, 16:14 IST

1) Which of the following is not true about Stylometry Analysis? *1 point*

- It is quantitative study of literature style
- It is based on the observation that the authors tend to write in relatively consistent and recognisable ways
- any two people may have same vocabulary
- It is a tool to study variety of questions involving style of writing

Yes, the answer is correct.
Score: 1
Accepted Answers:
any two people may have same vocabulary

2) An author's stylic signature can be analysed by which of the following method(s)? *1 point*

- Plot a graph of word length distribution
- Kilgariff's Chi Squared method
- John Burrow's Delta method
- All of the above

Yes, the answer is correct.
Score: 1
Accepted Answers:
All of the above

3) What is the output of the following code? *1 point*

```
from nltk.tokenize import sent_tokenize

mytext = "Have nice day, my friend!!! Programming in Python is fun"

print(sent_tokenize(mytext))
```

['Have nice day, my friend!!! Programming in Python is fun']

['Have nice day, my friend!!!', 'Programming in Python is fun']

'Have nice day, my friend!!!'
'Programming in Python is fun'

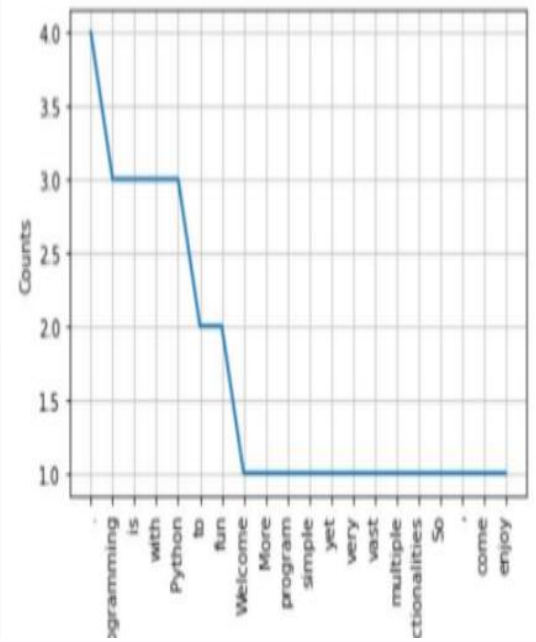
error

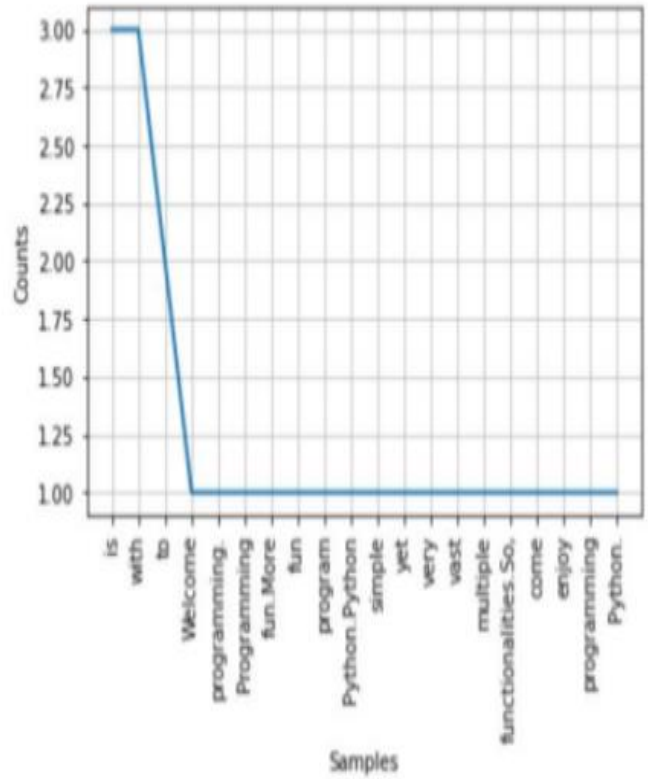
Yes, the answer is correct.
Score: 1

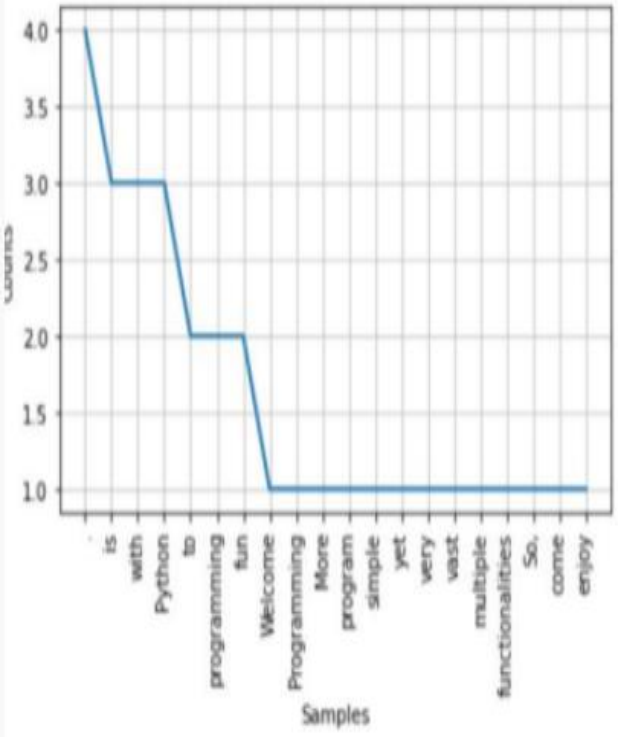
Accepted Answers:
['Have nice day, my friend!!!', 'Programming in Python is fun']

4) What is the output of the following code? 1

```
from nltk.tokenize import sent_tokenize
from nltk.corpus import stopwords
text1 = "Welcome to programming . Programming is fun ."
text2 = " More fun is to program with Python ."
text3 = " Python is simple yet very vast with multiple functionalities ."
text4 = " So, come enjoy programming with Python"
mytext = text1 + text2 + text3 + text4
tokens = [t for t in mytext.split()]
sr= stopwords.words('english')
clean_tokens = tokens[:]
freq = nltk.FreqDist(tokens)
freq.plot(20, cumulative=False)
```



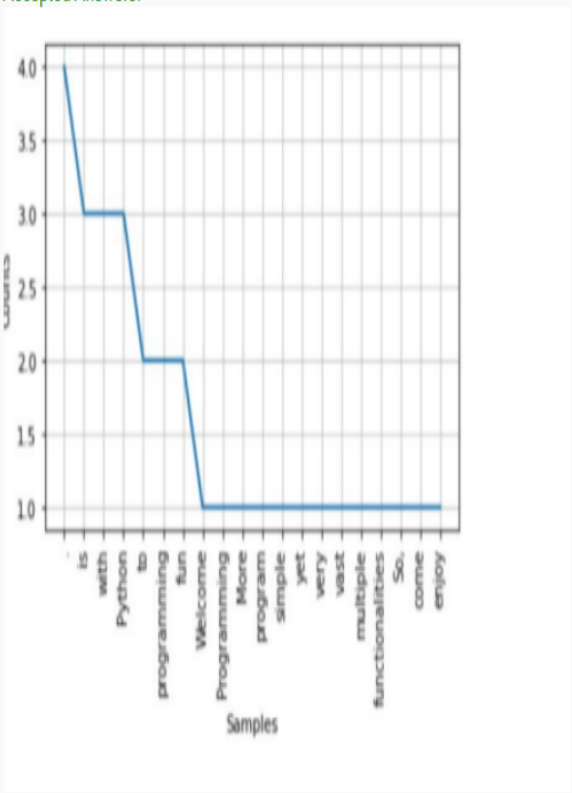




none of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:



5) Strings in python can be created using **1 point**

- single quotes
- double quotes
- triple quotes
- only A and B
- A, B and C

Yes, the answer is correct.
Score: 1

Accepted Answers:
A, B and C

6) Networkx in python is used for which of the following operation(s)? **1 point**

- Visualizing social network
- Analyzing social network
- Generate social network
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:

All of the above

7) Which of the following will generate a complete graph in python using Networkx package? **1 point**

- Graph = nx.gnp random graph(25,0.5)
- Graph = nx.gnp random graph(25,1.0)
- Graph = nx.gnp random graph(25,0.25)
- Graph = nx.gnp random graph(25,0.75)

Yes, the answer is correct.
Score: 1

Accepted Answers:
Graph = nx.gnp random graph(25,1.0)

8) Degree of separation of a complete graph with n nodes is always **1 point**

- n
- n-1
- 1
- 6

Yes, the answer is correct.
Score: 1

Accepted Answers:
1

9) Which of the following is true about six degrees of seperation? **1 point**

- the minimum degree of separation of any node in the network is 6
- the maximum degree of separation of any node in the network is 6
- the average degree of separation of the nodes in the network is 6
- the degree of separation of every node in the network is 6

Yes, the answer is correct.
Score: 1

Accepted Answers:
the average degree of separation of the nodes in the network is 6

10) Which of the following method will return the RBG value of a pixel in python? **1 point**

- getpixel()
- RBGvalue()
- pixelValue()
- none of the above

Yes, the answer is correct.
Score: 1

Assignment 10

The due date for submitting this assignment has passed.

Due on 2021-03-31, 23:59 IST.

Assignment submitted on 2021-03-29, 19:10 IST

1) The game "**FLAMES**" represents which of the following mathematics question? *1 point*

- (•) Josephus problem
- ( ) Euclid's problem
- ( ) Euler's problem
- ( ) none of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
Josephus problem

2) Predict the output of the following code *1 point*

```
import string
S = "Hello"
S = S.uppercase()
print(S)
```

- ( ) HELLO
- ( ) Hello
- ( ) hello
- (•) error

Yes, the answer is correct.
Score: 1

Accepted Answers:
error

3) Predict the output of the following code *1 point*

```
import string
s1 = "Hello"
s2 = "good morning"
s = s1+s2
s = s.replace(" ","")
print(s)
```

- (•) Hellogoodmorning
- ( ) Hello goodmorning
- ( ) Hello good morning
- ( ) error

Yes, the answer is correct.
Score: 1

Accepted Answers:
Hellogoodmorning

4) What does the following code snippet in python print? ***1 point***

```
import string
s = "Cinderella"
print(s[2:5])
```

- ( ) der
- ( ) ind
- (•) nde
- ( ) de

Yes, the answer is correct.
Score: 1

Accepted Answers:
nde

5) In python, the default value of start and end index of list slicing are which of the following options? ***1 point***

- ( ) 1, length of the list
- ( ) 0, length of the list
- (•) 0, length of the list -1
- ( ) 1, length of the list -1

No, the answer is incorrect.
Score: 0

Accepted Answers:
0, length of the list

6) Which of the following is not a functionality of string in python? ***1 point***

- lower()
- replace()
- isalpha()
- append()

Yes, the answer is correct.
Score: 1

Accepted Answers:
append()

7) Predict the output ***1 point***

```
import numpy as np
arr = np.array([[1,2,3],[4,5,6]])
print(type(arr))
```

- class 'numpy.2darray'
- int32
- class 'numpy.ndarray'
- error

Yes, the answer is correct.
Score: 1

Accepted Answers:
class 'numpy.ndarray'

8) Which of the following code snippet will print transpose of the matrix a? ***1 point***

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(a.Tran())
```

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(a.Transpose())
```

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(a.Trans)
```

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(a.T)
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(a.T)
```

9) Which of the following will print column sum of the matrix a? ***1 point***

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(np.sum(a,axis=0))
```

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(np.sum(a,axis=1))
```

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(np.sum(a.col))
```

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(np.colsum(a))
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
import numpy as np
a = np.array([[1,2],[3,4]])
print(np.sum(a,axis=0))
```

10) Image compression is always a lossy compression. ***1 point***

- True
- False

Yes, the answer is correct.
Score: 1

Accepted Answers:
False

Assignment 11

The due date for submitting this assignment has passed.

Due on 2021-04-07, 23:59 IST.

Assignment submitted on 2021-04-02, 14:18 IST

1) The python library **selenium** is used for which of the following concepts *1 point*

- File Handling
- Image processing
- Natural Language Processing
- Browser automation

Yes, the answer is correct.
Score: 1

Accepted Answers:
Browser automation

2) Which of the following is true about Browser automation? *1 point*

- load and performance testing on the websites
- web data extraction
- automated testing
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
All of the above

3) The python function for converting a number into a string is *1 point*

- numtostring()
- str()
- to_string()
- numstring()

Yes, the answer is correct.
Score: 1

Accepted Answers:
str()

4) Which of the following is the python library for setting the timezone? *1 point*

- pytimezone
- pythonTimeZone
- timezone
- pytz

Yes, the answer is correct.
Score: 1

Accepted Answers:
pytz

5) Which of the following code snippet will print today's date? **1 point**

```
from datetime import date
today = date.today()
```

```
from datetime import datetime
today = datetime.now()
```

- Both A and B
- none

Yes, the answer is correct.
Score: 1

Accepted Answers:
Both A and B

6) Predict the output: **1 point**

```
import calendar
yy = 2017
mm = 11
dd = 15
print(calendar.month(yy, mm))
```

```
    November 2017
Mo Tu We Th Fr Sa Su
       1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30
```

```
   November 2017
Mo Tu We Th Fr Sa Su
       1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30
```

```
15 November 2017
```

Error

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
   November 2017
Mo Tu We Th Fr Sa Su
       1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30
```

7) What does the following code print?

```
import calendar
print (calendar.leapdays(2000, 2020))
```

- Number of leapdays between the specified years
- Lists all leapdays between the specified years
- Lists the leapdays and its count between the specified years
- None

Yes, the answer is correct.
Score: 1

Accepted Answers:
Number of leapdays between the specified years

8) What does the python function: **calendar.weekday(year, month, day)** return if the weekday is Friday?

- 3
- 4
- 5
- 6

Yes, the answer is correct.
Score: 1

Accepted Answers:
4

9) What is the return value of the following python function : **datetime.datetime.utcnow()** ***1 point***

- returns the coordinated universal time
- returns the current user time
- returns the coordinated user time
- returns the concurrent universal time

Yes, the answer is correct.
Score: 1

Accepted Answers:
returns the coordinated universal time

10) Which of the following is the correct code to find whether a given year is a leap year or not? ***1 point***

```
year = int(input())
if (year % 100) or (year % 400) == 0:
    print("leap year")
else:
    print("not a leap year")
```

```
year = int(input())
if (year % 100) == 0:
    if (year % 400) == 0:
            print("leap year")
    else:
            print("not a leap year")
else:
        print("leap year")
```

```
year = int(input())
if (year % 4) == 0:
    if (year % 100) == 0:
        if (year % 400) == 0:
            print("leap year")
        else:
            print("not a leap year")
    else:
        print("leap year")
else:
    print("not a leap year")
```

```
year = int(input())
if (year % 100) or (year % 400) == 0:
    print("leap year")
else:
    print("not a leap year")
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
year = int(input())
if (year % 4) == 0:
    if (year % 100) == 0:
        if (year % 400) == 0:
            print("leap year")
        else:
            print("not a leap year")
    else:
        print("leap year")
else:
    print("not a leap year")
```

Assignment 12

The due date for submitting this assignment has passed.

Due on 2021-04-14, 23:59 IST.

Assignment submitted on 2021-04-14, 20:16 IST

1) Which of the following is true about the web graph used for performing Google page ranking? ***1 point***

- nodes are the hyperlinks and edges are the web pages
- nodes are the web pages and edges are the hyperlinks
- nodes and edges both represent hyperlinks
- nodes and edges both represent web pages

Yes, the answer is correct.
Score: 1

Accepted Answers:
nodes are the web pages and edges are the hyperlinks

2) In page ranking, the most impressive person is the person liked by maximum number of people. ***1 point***

- TRUE
- FALSE

Yes, the answer is correct.
Score: 1

Accepted Answers:
FALSE

3) What is not true about page ranking algorithm? ***1 point***

- involves a random walk around the network
- involves a drunkard walk around the network
- high ranked node is the one with maximum visits
- high ranked node is the one with maximum hyperlink

Yes, the answer is correct.
Score: 1

Accepted Answers:
high ranked node is the one with maximum hyperlink

4) In page ranking algorithm ***1 point***

- we always begin ranking from the first node.
- we randomly move from one node to another

- we stop at the sink node
- All the above statements are true

Yes, the answer is correct.
Score: 1

Accepted Answers:
we randomly move from one node to another

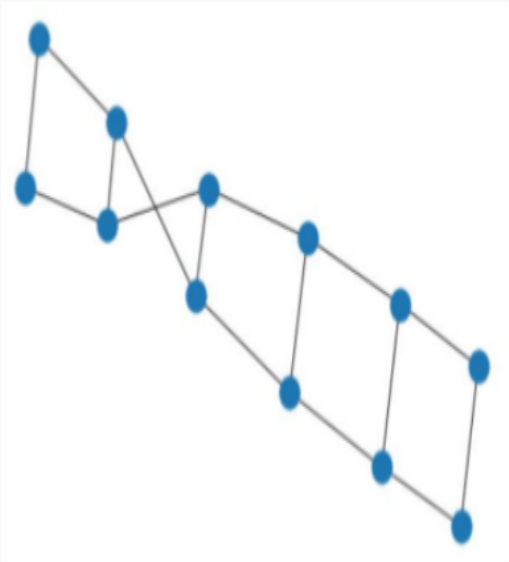
5) In Barbell graph() function of Networkx **1 point**

- the first parameter represents number of communities and the second parameter represents number of nodes in-between the communities
- the first parameter represents number of nodes in the two communities and the second parameter represents number of nodes in-between the communities
- the first parameter represents number of nodes in-between the communities and the second parameter represents number of nodes in the two communities
- the first parameter represents number of nodes in-between the communities and the second parameter represents number of communities

Yes, the answer is correct.
Score: 1

Accepted Answers:
the first parameter represents number of nodes in the two communities and the second parameter represents number of nodes in-between the communities

6) What is the type of the following graph? **1 point**

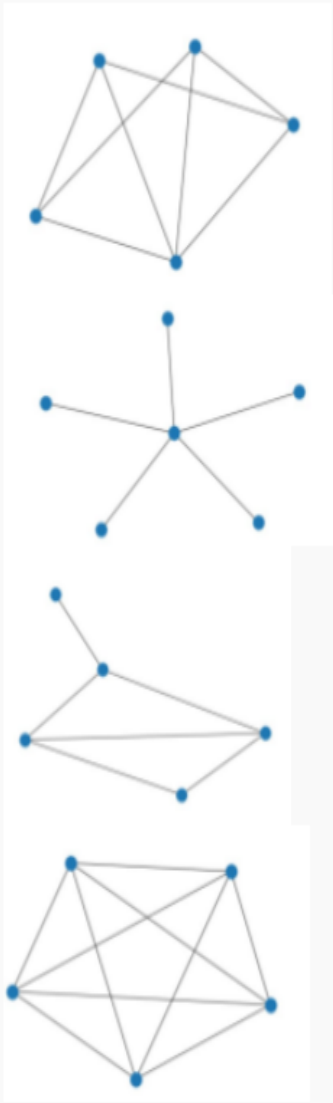


- star graph
- barbell graph
- ladder graph
- wheel graph

Yes, the answer is correct.
Score: 1

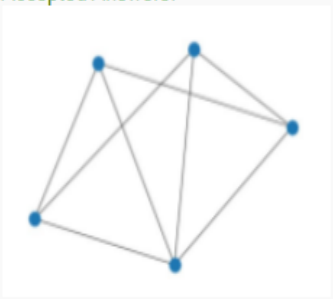
Accepted Answers:

7) Which of the following graph represent a Wheel graph of 5 nodes?



Yes, the answer is correct.
Score: 1

Accepted Answers:



8) What is the next step in page ranking algorithm, if the current node in the walk is a sink ?

- the algorithm stops
- the next node is selected randomly from the given set of nodes present in the graph
- the next node is selected randomly from the list of neighbours of the current node
- the algorithm restarts from the current node

Yes, the answer is correct.
Score: 1

Accepted Answers:
the next node is selected randomly from the given set of nodes present in the graph

9) Which of the following is a directed network? ***1 point***

- Social Networking
- Supply Chain networks
- Citation Network
- All of the above

Yes, the answer is correct.
Score: 1

Accepted Answers:
All of the above

10) Which of the following python function will return random floating point number between 0 and 1? ***1 point***

- random.float()
- random.randomfloat()
- random.frandom()
- random.random()

Yes, the answer is correct.
Score: 1

Accepted Answers:
random.random()