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 telegram id @Ak4Gp

X



(https://swayam.gov.in)



(https://swayam.gov.in/nc_details/NPTEL)

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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » The Joy of Computing using Python (course)

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Course outline

How does an NPTEL online course work? ()

Week 0 ()

Week 1 ()

○ Introduction to Programming (unit? unit=17&lesson=18)

○ Why Programming? (unit? unit=17&lesson=19)

○ Programming for Everybody (unit? unit=17&lesson=20)

○ Any Prerequisites? (unit? unit=17&lesson=21)

○ Where to start? (unit? unit=17&lesson=22)

Week 1: Assignment 1

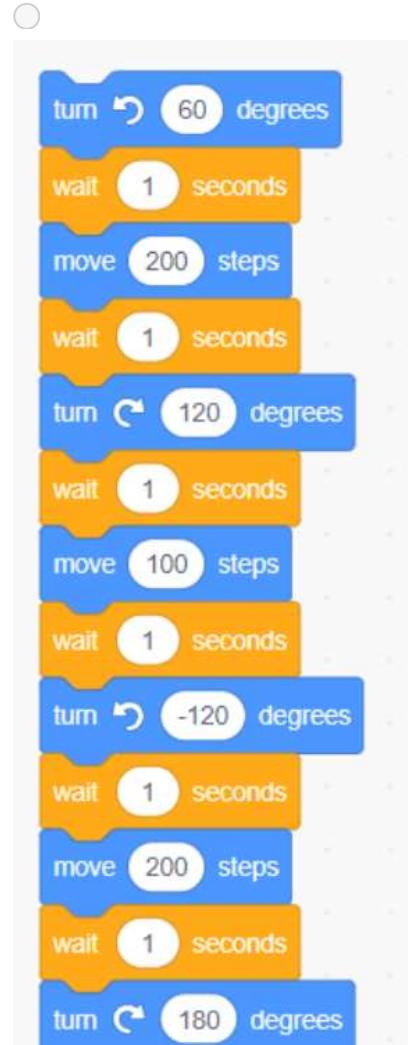
The due date for submitting this assignment has passed.

Due on 2022-02-09, 23:59 IST.

Assignment submitted on 2022-02-05, 22:44 IST

- 1) Which of the following set of instructions will make the sprite(the cat) move in a triangle?
 (Final and initial position, as well as the angle of the cat, should be the same) **1 point**

- Why do we have so many languages? (unit?
unit=17&lesson=23)
- How to go about programming? (unit?
unit=17&lesson=24)
- Why to learn programming? (unit?
unit=17&lesson=25)
- What is programming? (unit?
unit=17&lesson=26)
- How to give instructions? (unit?
unit=17&lesson=27)
- Introduction to Scratch (unit?
unit=17&lesson=28)
- Introduction to Loops (unit?
unit=17&lesson=29)
- More about Loops (unit?
unit=17&lesson=30)
- Solution to Looping Problem (unit?
unit=17&lesson=31)
- Scratch : Animation 1 (unit?
unit=17&lesson=32)
- Scratch : Animation 2 (unit?
unit=17&lesson=33)
- Scratch : Animation 3 (unit?
unit=17&lesson=34)
- More on Scratch (unit?)



unit=17&lesson=35)

● Quiz: Week 1:
Assignment 1
(assessment?
name=286)

○ Week 1
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=17&lesson=36)

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

Week 10 ()

Week 11 ()

Week 12 ()

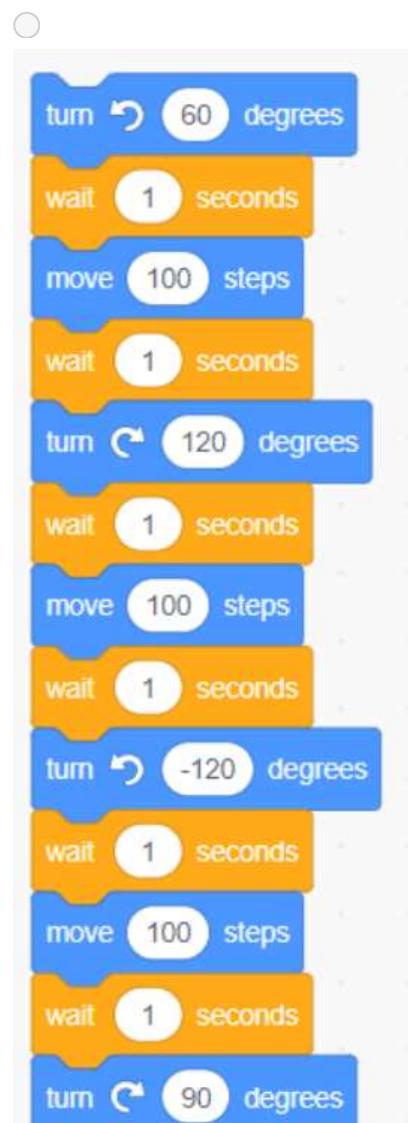
Text
Transcripts ()

Download
Videos ()

Books ()

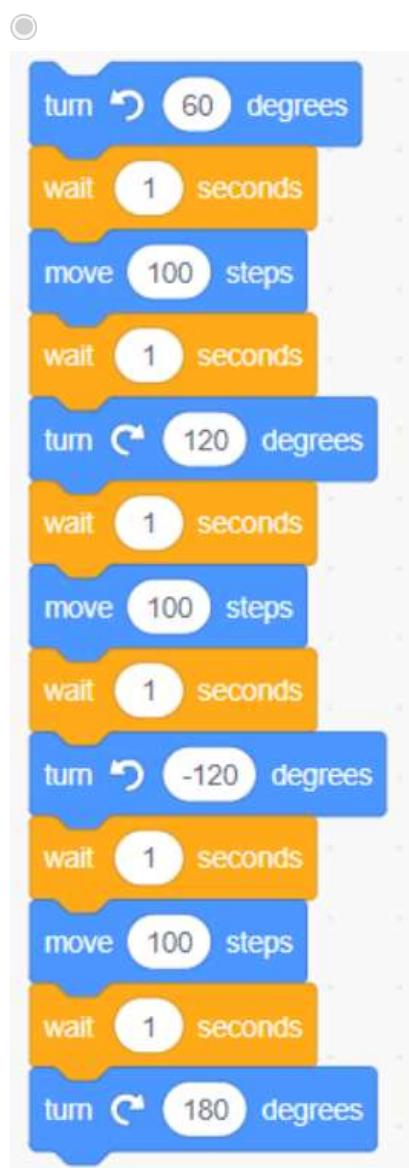
Live Session
()

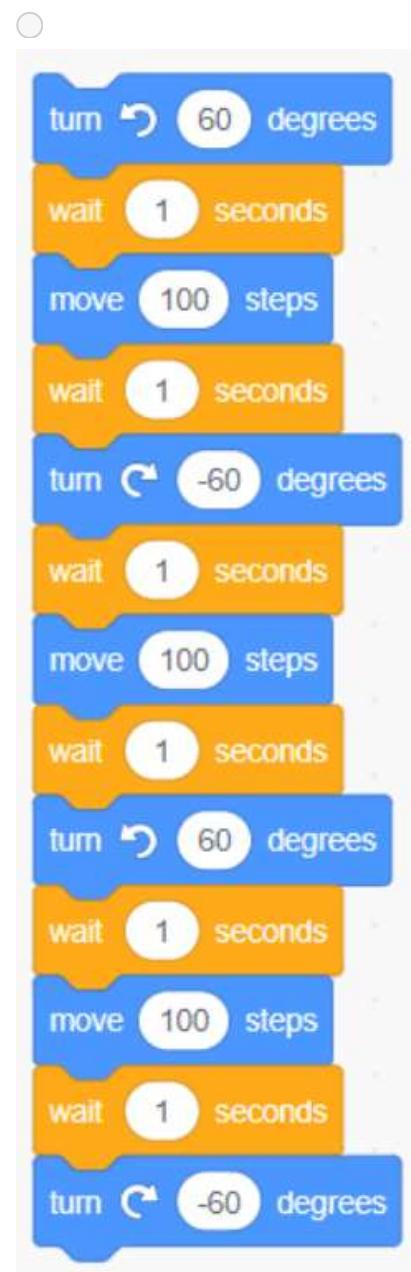
Programming
test -
Session 1
(April 17



2022-10AM
to 1 PM) ()

Programming
test -
Session 2
(April 17
2022-8 PM to
11 PM) ()

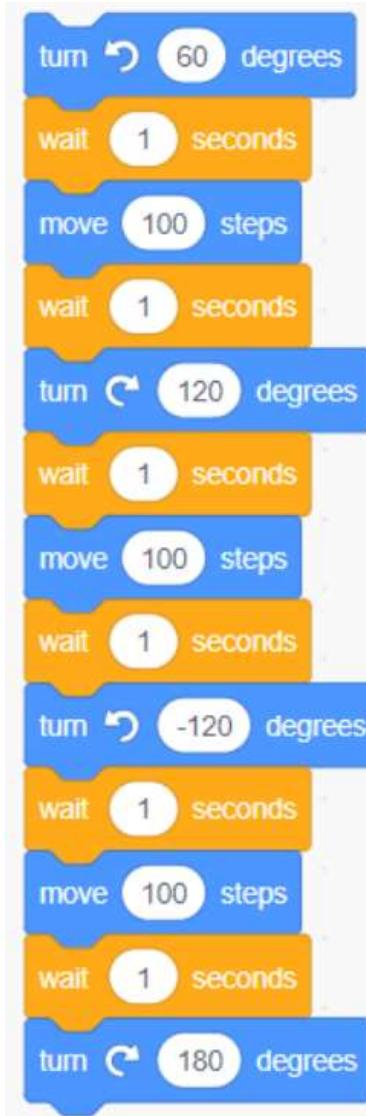




Yes, the answer is correct.

Score: 1

Accepted Answers:



2) What will be the value of my variable at the end of the loop

1 point



- 50
 40

49 0

Yes, the answer is correct.

Score: 1

Accepted Answers:

40

3) What will be the value of my variable?

1 point

 20 10 22 25

Yes, the answer is correct.

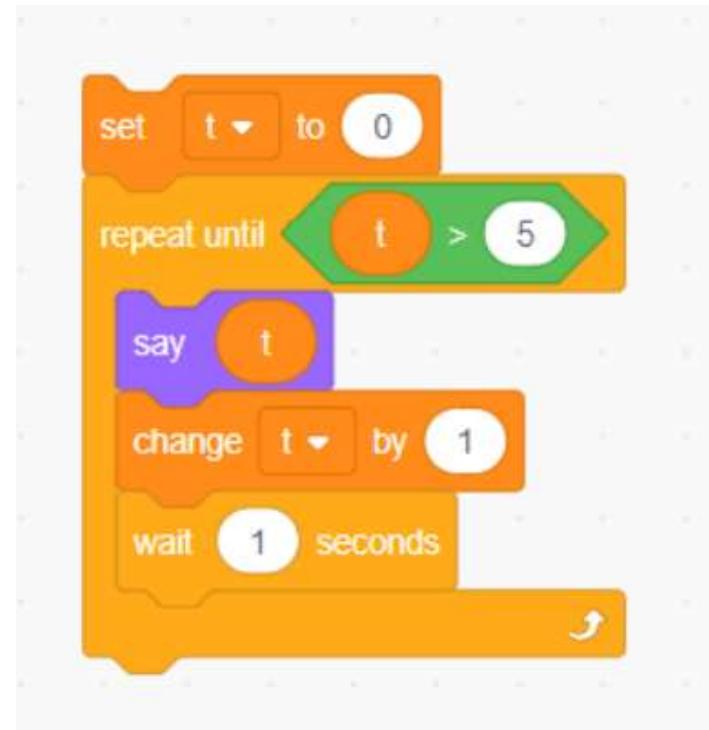
Score: 1

Accepted Answers:

22

4) What the sprite(the cat) will say?

1 point



- 0, 1, 2, 3, 4, 5
 1, 2, 3, 4, 5
 1, 2, 3, 4, 5, 6
 None of the above

Yes, the answer is correct.

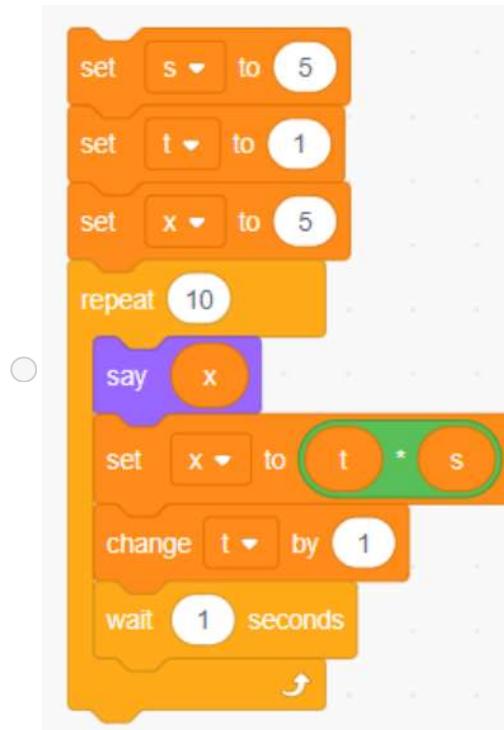
Score: 1

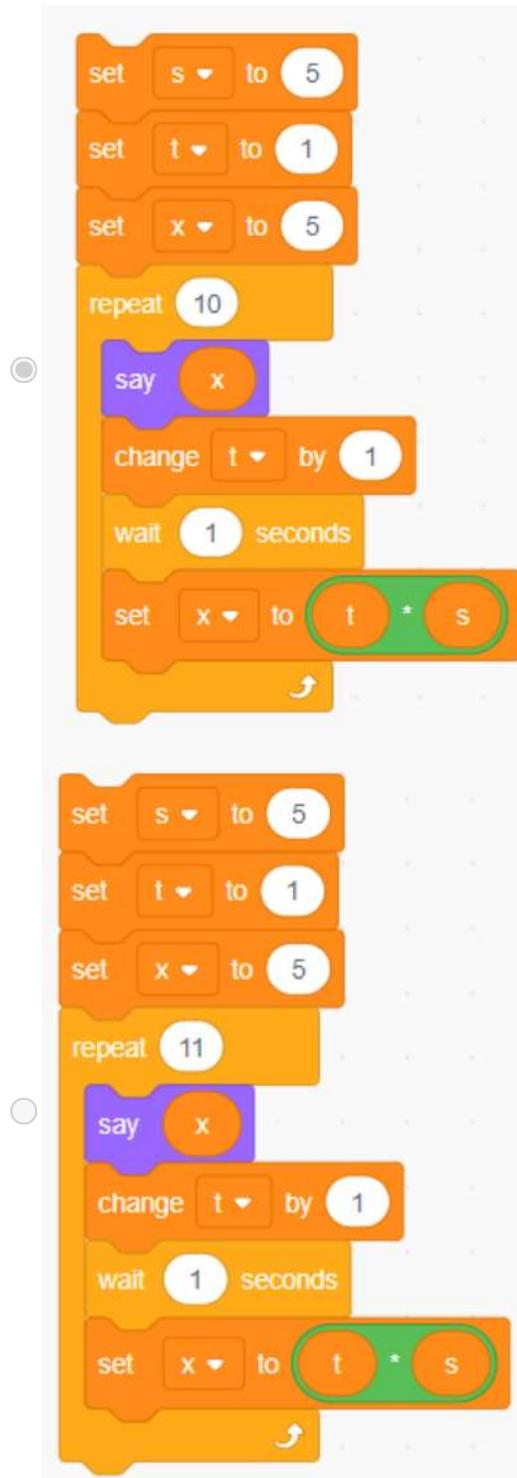
Accepted Answers:

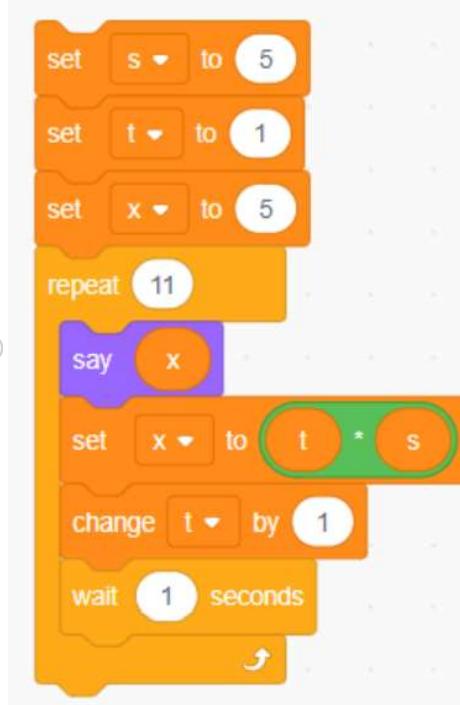
0, 1, 2, 3, 4, 5

5) What should be a set of instructions to make our sprite(cat) say a table of 5?

1 point







Yes, the answer is correct.

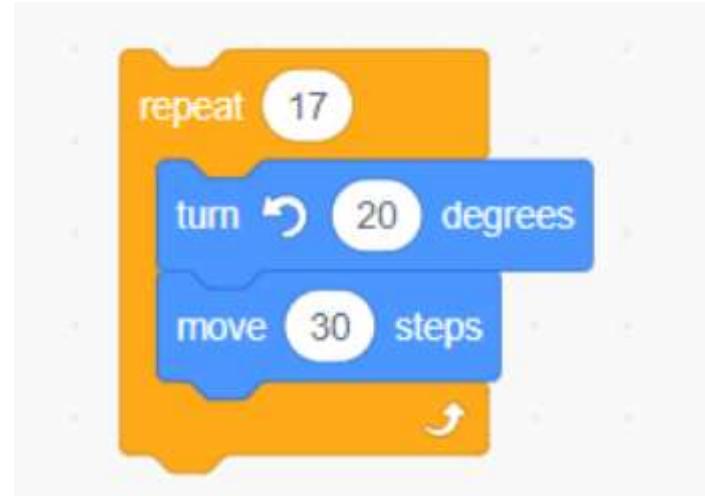
Score: 1

Accepted Answers:



- 6) Imagine a cricket ball as our sprite, the ball will move in

1 point



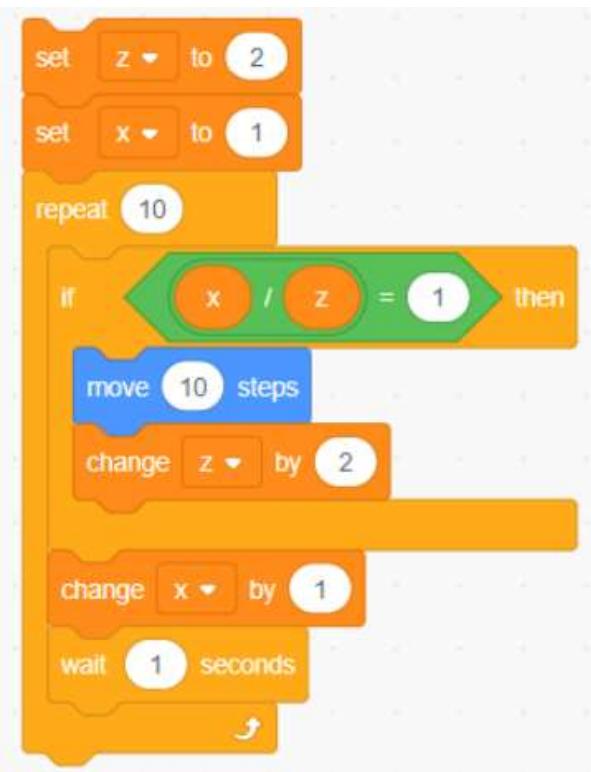
- a straight line.
- Circular motion.
- Curve path.
- Up and Down.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Circular motion.

7) Imagine sprite to be a scooter. How many times scooter will move forward?

1 point



- 7
- 4
- 6
- 5

Yes, the answer is correct.

Score: 1

Accepted Answers:

5

- 8) Imagine a cricket player hitting a sixer on a delivery. Which code block represents the upward moment and downward movement of the ball. **1 point**



- Left Block represents downward movement and the right block represents upward movement.
- Left Block represents upward movement and the right block represents downward movement.
- Both blocks represent upward movement.
- Both blocks represent downward movement.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Left Block represents upward movement and the right block represents downward movement.

- 9) Which of the following statements is true about the following block of code? **1 point**



- This code block is adding 7 random numbers between 1 - 10 to x
- This code block is adding 10 random numbers between 1 - 10 to x.
- This code block is adding 7 random numbers between 1 - 10 to t.
- This code block is adding 10 random numbers between 1 - 10 to t.

Yes, the answer is correct.

Score: 1

Accepted Answers:

This code block is adding 7 random numbers between 1 - 10 to x

10) Which of the following is true about scratch?

1 point

- We can not add sound to our animations.
- We can not make a picture disappear.
- We can run a forever loop.
- We can not make new variables.

Yes, the answer is correct.

Score: 1

Accepted Answers:

We can run a forever loop.

X



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Course outline

How does an NPTEL online course work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Introduction to Anaconda (unit? unit=37&lesson=38)

Installation of Anaconda (unit? unit=37&lesson=39)

Introduction to Spyder IDE (unit? unit=37&lesson=40)

Printing statements in Python (unit? unit=37&lesson=41)

Week 2: Assignment 2

The due date for submitting this assignment has passed.

Due on 2022-02-09, 23:59 IST.

Assignment submitted on 2022-01-28, 21:22 IST

1) Which statement will print 'The joy of computing'? 1 point

- print(The joy of computing)
- print The joy of computing
- printf('The joy of computing')
- print('The joy of computing')

Yes, the answer is correct.

Score: 1

Accepted Answers:

print('The joy of computing')

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

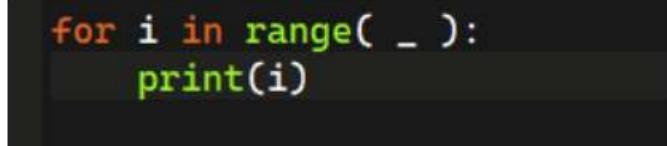
```

1   a = "round."
2   b = "lot of"
3   c= "dust."
4
5
6   print('Earth is')
7   print(a)
8   print("Moon has", b, c)

```

- Earth is round.
Moon has lot of dust.

- | | |
|---|--|
| <input type="radio"/> Understanding Variables in Python (unit? unit=37&lesson=42) | <input type="radio"/> Earth is round.
Moon has lot of dust. |
| <input type="radio"/> Executing a sequence of instructions in the Console (unit? unit=37&lesson=43) | <input checked="" type="radio"/> Earth is round.
Moon has lot of dust
<input type="radio"/> Earth is round.Moon has lot of dust. |
| <input type="radio"/> Writing your First Program (unit? unit=37&lesson=44) | Yes, the answer is correct.
Score: 1
Accepted Answers:
<i>Earth is
round.
Moon has lot of dust</i> |
| <input type="radio"/> Taking inputs from the user (unit? unit=37&lesson=45) | 3) What should be the syntax of getting age as an input from a user in python? 1 point

<input type="radio"/> Age = int("Enter Age")
<input checked="" type="radio"/> Age = input("Enter Age")
<input type="radio"/> Age = get("Enter Age")
<input type="radio"/> Age = input(Enter Age) |
| <input type="radio"/> Discount Calculation (unit? unit=37&lesson=46) | Yes, the answer is correct.
Score: 1 |
| <input type="radio"/> Motivation to if condition (unit? unit=37&lesson=47) | Accepted Answers:
<i>Age = input("Enter Age")</i> |
| <input type="radio"/> A reminder on how to deal with numbers (unit? unit=37&lesson=48) | 4) What should be the value of _ to print all numbers from 0-10? 1 point |
| <input type="radio"/> Understanding if condition's working (unit? unit=37&lesson=49) | 

<input type="radio"/> 10
<input type="radio"/> 9
<input checked="" type="radio"/> 11
<input type="radio"/> None of the above |
| <input type="radio"/> Realizing the importance of syntax and indentation (unit? unit=37&lesson=50) | Yes, the answer is correct.
Score: 1
Accepted Answers:
<i>11</i> |
| <input type="radio"/> Introductions to loops (unit? unit=37&lesson=51) | 5) What will be the output of the following code? 1 point |
| <input type="radio"/> Loops: Sum of numbers (unit? unit=37&lesson=52) | |
| <input type="radio"/> Loops: Sum of numbers | |

(continued)
 (unit?
 unit=37&lesson=53)

Loops:
 Multiplication
 Tables (unit?
 unit=37&lesson=54)

Introduction to
 While Loop
 (unit?
 unit=37&lesson=55)

Quiz: Week 2:
Assignment 2
(assessment?
name=287)

Week 2:
 Programming
 Assignment 1
 (/noc22_cs31/progassignment?
 name=303)

- 0
- 45
- 43
- 50

Yes, the answer is correct.
 Score: 1

Accepted Answers:

45

6) What will be the output? **suppose the input is 20**

1 point

Week 2:
 Programming
 Assignment 2
 (/noc22_cs31/progassignment?
 name=304)

```
1
2     number = input("Enter Number")
3
4     new_number = number * 2
5
6     print(new_number)
7
```

- 40
- Error
- 2020
- None of the above

Yes, the answer is correct.
 Score: 1

Accepted Answers:

2020

Week 2
 Feedback
 Form: The Joy
 of Computing
 using Python
 (unit?
 unit=37&lesson=56)

Week 3 ()

7) What will be the output of the following code be?

1 point

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

[Week 10 \(\)](#)[Week 11 \(\)](#)[Week 12 \(\)](#)[Text](#)[Transcripts \(\)](#)[Download](#)[Videos \(\)](#)[Books \(\)](#)[Live Session \(\)](#)[Programming test -](#)[Session 1](#)[\(April 17](#)[2022-10AM](#)[to 1 PM\) \(\)](#)[Programming test -](#)[Session 2](#)[\(April 17](#)[2022-8 PM to](#)[11 PM\) \(\)](#)

```

number = 20/10 * 0

if(number < 0):
    print('numbrt is less than 0')

if(number > 0):
    print('number is greater than zero')

if(number = 0):
    print('number is zero')

```

- number is less than 0
- number is greater than 0
- number is zero
- Error

Yes, the answer is correct.

Score: 1

Accepted Answers:

Error

8) What will be the output of the following code?

1 point

```

2     a = 10
3
4     for i in range(10):
5         a = i
6
7     print(a)

```

- 9
- 10
- 0
- None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

9

9) What will be the output of the following code?

1 point

```
2     a = 1
3     for i in range(10):
4
5         a = a + (i+1)
6
7     print(a)
```

- 56
- 45
- 0
- Error

Yes, the answer is correct.

Score: 1

Accepted Answers:

56

10) What will be the output of the following code?

1 point

```
2     a = 0
3     while(a < 10):
4         a = a+2
5     print(a)
```

- 1,2,3,4,5,6,7,8,9,10
- 2,4,6,8,10
- 0,1,2,3,4,5,6,7,8,9,10
- Error

Yes, the answer is correct.

Score: 1

Accepted Answers:

2,4,6,8,10

X



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Course outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

Lists Part 1 :
Introduction
(unit?
unit=57&lesson=58)

Lists Part 2 :
Manipulation
(unit?
unit=57&lesson=59)

Lists Part 3 :
Operations
(unit?
unit=57&lesson=60)

Lists Part 4 :
Slicing (unit?
unit=57&lesson=61)

Week 3: Assignment 3

The due date for submitting this assignment has passed.

Due on 2022-02-16, 23:59 IST.

Assignment submitted on 2022-02-04, 22:04 IST

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

1 point

```
1 L = ["Practice", "makes", "the", "man", "perfect."]
2 L.sort()
3
4 for element in L:
5     print(element)
```

- Practice,Practice,Practice,Practice,Practice
- Practice makes the man perfect.
- Practice makes man perfect. the
- Makes man perfect. Practice the

Yes, the answer is correct.
Score: 1

Accepted Answers:

Practice makes man perfect. the

2) What should be the code to print all Even numbers between 1-10 (both inclusive)? 1 point

```
1 for i in range(10):
2     if(i%2 == 0):
3         print(i)
```

Loops and Conditionals :
Fizzbuzz 01
(unit?
unit=57&lesson=62)

```
1 for i in range(11):
2     if(i%2 == 0):
3         print(i)
```

Loops and Conditionals :
Fizzbuzz 02
(unit?
unit=57&lesson=63)

```
1 for i in range(1,11):
2     if(i%2 == 0):
3         print(i)
```

Crowd Computing -
Just estimate
01 (unit?
unit=57&lesson=64)

```
1 for i in range(1,11):
2     if(i%2 == 1):
3         print(i)
```

Crowd Computing -
Just estimate
02 (unit?
unit=57&lesson=65)

Yes, the answer is correct.

Score: 1

Accepted Answers:

```
1 for i in range(1,11):
2     if(i%2 == 0):
3         print(i)
```

Crowd Computing -
Just estimate
03 (unit?
unit=57&lesson=66)

Crowd Computing -
Just estimate
04 (unit?
unit=57&lesson=67)

3) What will be the output of the following code?

1 point

```
1 import random
2
3 L = []
4 for i in range(10):
5     L.append(random.randint(0, 10))
6
7 L.sort()
8 L.reverse()
9
10 print(L)
```

- Sorted List(L) containing random elements between 0-10 in descending order.
- Sorted List containing random elements between 0-10 in ascending order.
- Sorted List containing elements between 0-10.
- Sorted List containing elements between 0-9 in ascending order.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Sorted List(L) containing random elements between 0-10 in descending order.

Permutations -
Jumbled
Words 01
(unit?
unit=57&lesson=70)

Permutations -
Jumbled
Words 02
(unit?
unit=57&lesson=71)

4) What will be the output of the following code?

1 point

- Permutations - Jumbled Words 03 (unit? unit=57&lesson=72)

```

1 L = ["we", "were", "here", "together"]
2
3 for i in range(3):
4     print(L[i])

```

- Theory of Evolution 01 (unit? unit=57&lesson=73)

- we were here together
- we were here
- we were
- we

Yes, the answer is correct.

Score: 1

Accepted Answers:

we were here

- 5) What will be the value of list L?

1 point

- Theory of Evolution 02 (unit? unit=57&lesson=74)

- Theory of Evolution 03 (unit? unit=57&lesson=75)

- Theory of Evolution 04 (unit? unit=57&lesson=76)

- Quiz: Week 3: Assignment 3 (assessment? name=288)

- Week 3 Feedback Form: The Joy of Computing using Python (unit? unit=57&lesson=77)

- Week 3: Programming Assignment 1 (/noc22_cs31/progassignment? name=307)

- ['Even', 'Odd', 'Even', 'Odd']
- ['Even', 'Odd', 'Even', 'Odd', 'Even', 'Odd']
- ['Even', 'Odd', 'Even', 'Even', 'Even']
- ['Even', 'Odd', 'Even', 'Odd', 'Even']

Yes, the answer is correct.

Score: 1

Accepted Answers:

['Even', 'Odd', 'Even', 'Odd', 'Even']

- 6) What is the correct code for a function to return the sum of elements of list L?

1 point

```

1 L = []
2
3 for i in range(5):
4     if (i%2 == 0):
5         L.append("Even")
6     else:
7         L.append("Odd")
8
9 print(L)

```

- Week 3: Programming Assignment 2 (/noc22_cs31/progassignment? name=308)

- Week 3: Programming Assignment 3 (/noc22_cs31/progassignment? name=309)

week 4 ()

[Week 5 \(\)](#)[Week 6 \(\)](#)[Week 7 \(\)](#)[Week 8 \(\)](#)[Week 9 \(\)](#)[Week 10 \(\)](#)[Week 11 \(\)](#)[Week 12 \(\)](#)[Text](#)[Transcripts \(\)](#)[Download Videos \(\)](#)[Books \(\)](#)[Live Session \(\)](#)

Programming test - Session 1 (April 17 2022-10AM to 1 PM) ()

Programming test - Session 2 (April 17 2022-8 PM to 11 PM) ()

```
1 def sum_of_list(L):
2
3     Total = 0
4
5     for i in range(len(L)):
6         Total = Total + L[i]
7
8     return Total
9
10 L = [1,2,3,4,5,6,7,8,9,10]
11 total_sum = sum_of_list(L)
12
13 print(total_sum)
```

```
1 def sum_of_list(L):
2
3     Total = 0
4
5     for i in range(len(L)):
6         Total = Total + L[i]
7
8
9 L = [1,2,3,4,5,6,7,8,9,10]
10 total_sum = sum_of_list(L)
11
12 print(total_sum)
```

```
1 def sum_of_list():
2
3     Total = 0
4
5     for i in range(len(L)):
6         Total = Total + L[i]
7
8     return Total
9
10 L = [1,2,3,4,5,6,7,8,9,10]
11 total_sum = sum_of_list(L)
12
13 print(total_sum)
```

```

1  def sum_of_list(L):
2
3      Total = 0
4
5      for i in range(len(L)):
6          Total = Total + L[i]
7
8      return Total
9
10 L = [1,2,3,4,5,6,7,8,9,10]
11
12 total_sum = sum_of_list()
13
14 print(total_sum)

```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```

1  def sum_of_list(L):
2
3      Total = 0
4
5      for i in range(len(L)):
6          Total = Total + L[i]
7
8      return Total
9
10 L = [1,2,3,4,5,6,7,8,9,10]
11
12 total_sum = sum_of_list(L)
13
14 print(total_sum)

```

7) What does the following code represent?

1 point

```

1  a = int(input("Enter number 1"))
2  b = int(input("Enter number 2"))
3
4  while(1):
5
6      if(a%b == 0):
7          print("Wow...")
8          break
9
10     else:
11         print("If you want to continue press 1 else 0")
12         choice = int(input())
13
14         if(choice == 1):
15             b = int(input("Enter second number again"))
16
17         if(choice == 0):
18             break

```

Checks if a is divisible by b.

- Checks if b is divisible by a.
- Checks if a and b are multiples of 5.
- None of the above.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Checks if a is divisible by b.

8) Suppose there exists a file named file.txt. What the following code will do?

1 point

```

1  with open('file.txt','r') as file:
2      print(file.read())
3      file.write('hey there!!!')
4  file.close()

```

- Print whatever is there in the file and add hey there.
- Throws an error in the end as the file is not opened in writable mode.
- Throws an error in the end as the file is not opened in readable mode.
- No error will be thrown and the code will work fine.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Throws an error in the end as the file is not opened in writable mode.

9) Suppose there is an empty file named file.txt. What will be the output of the following code?

1 point

```

1  with open('file.txt','w') as file:
2      file.write('hey there!!!')
3  file.close()
4
5  with open('file.txt', 'a') as file:
6      file.write('writing this file again')
7
8  with open('file.txt', 'r') as file:
9      print(file.read())
10

```

- writing this file again
- hey there!!
- hey there!!writing this file again
- Throws an error

Yes, the answer is correct.

Score: 1

Accepted Answers:

hey there!!writing this file again

10) What will be the output of the following code?

1 point

```
1  with open('file.txt','w') as file:  
2      file.write('1000111011')  
3  
4      file.close()  
5  
6      with open('file.txt','r') as file:  
7          L = list(file.read())  
8  
9      file.close()  
10  
11     for i in range(len(L)):  
12         if(i%2 == 0 and L[i]=='0'):  
13             L[i]='1'  
14         if(i%2 != 0 and L[i]=='1'):  
15             L[i]='0'  
16  
17     print(L)
```

- Alternative 1's and 0's respectively
- Alternative 0's and 1's respectively.
- All Zeroes towards left and ones towards the right.
- All ones towards the left and zeroes towards the right.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Alternative 1's and 0's respectively

X



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(course)

≡

Course
outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Practice is the
key (unit?
unit=78&lesson=79)

Magic Square:
Hit and Trial
01 (unit?
unit=78&lesson=80)

Magic Square:
Hit and Trial
02 (unit?
unit=78&lesson=81)

Magic Square:
Hit and Trial

Week 4: Assignment 4

The due date for submitting this assignment has passed.

Due on 2022-02-23, 23:59 IST.

Assignment submitted on 2022-02-12, 09:20 IST

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

1 point

```

1 import string
2 import random
3
4 A = string.ascii_letters
5
6 n = int(input())
7
8 for i in range(n):
9     L = []
10    for j in range(n):
11        L.append(random.choice(A))
12
13    for element in L:
14        print(element, end='\t')
15
16 print()

```

- A magic square of size 2.
- A magic square of size n.
- A magic square of an even size.
- A magic square of an odd size.

03 (unit?
unit=78&lesson=82)

Yes, the answer is correct.
Score: 1

Accepted Answers:

A magic square of size n.

- 2) What is the correct code to display whether the entered year is a leap year or not? **0 points**

○ Magic Square:
Hit and Trial
04 (unit?
unit=78&lesson=83)

```
1 def leap_year(year):
2
3     if(year%400 == 0):
4         print("Its a leap year")
5         return
6     else:
7         print("not a leap year")
8         return
9
10    year = int(input("Enter Year: ")) #will convert in input into integer
11    leap_year(year)
```

○ Let's program
and play (unit?
unit=78&lesson=85)

```
1 def leap_year(year):
2
3     if(year%400 == 0 or year%4 == 0):
4         print("Its a leap year")
5
6     if(year%100 == 0):
7         print("not a leap year")
8         return
9
10    year = int(input("Enter Year: ")) #will convert in input into integer
11    leap_year(year)
```

○ Dobble Game
- Spot the
similarity 01
(unit?
unit=78&lesson=86)

```
1 def leap_year(year):
2
3     if(year%400 == 0 or year%4 == 0):
4         print("Its a leap year")
5
6     print("not a leap year")
7     return
8
9
10    year = int(input("Enter Year: ")) #will convert in input into integer
11    leap_year(year)
```

○ Dobble Game
- Spot the
similarity 02
(unit?
unit=78&lesson=87)

```
1 def leap_year(year):
2
3     if(year%400 == 0 or year%4 == 0):
4         print("Its a leap year")
5
6     return
7
8
9
10    year = int(input("Enter Year: ")) #will convert in input into integer
11    leap_year(year)
```

○ Dobble Game
- Spot the
similarity 03
(unit?
unit=78&lesson=88)

Yes, the answer is correct.
Score: 0

Accepted Answers:

○ Dobble Game
- Spot the
similarity 04
(unit?
unit=78&lesson=89)

○ What is your
date of birth?
(unit?
unit=78&lesson=90)

○ Birthday
Paradox - Find
your twin 01
(unit?
unit=78&lesson=91)

○ Birthday
Paradox - Find
your twin 02
(unit?
unit=78&lesson=92)

○ Birthday
Paradox - Find
your twin 03

(unit?
unit=78&lesson=93)

Birthday
Paradox - Find
your twin 04
(unit?
unit=78&lesson=94)

Birthday
Paradox - Find
your twin 05
(unit?
unit=78&lesson=95)

What's your
favourite
movie? (unit?
unit=78&lesson=96)

Guess the
Movie Name
01 (unit?
unit=78&lesson=97)

Guess the
Movie Name
02 (unit?
unit=78&lesson=98)

Guess the
Movie Name
03 (unit?
unit=78&lesson=99)

Guess the
Movie Name
04 (unit?
unit=78&lesson=100)

Guess the
Movie Name
05 (unit?
unit=78&lesson=101)

Guess the
Movie Name
06 (unit?
unit=78&lesson=102)

Quiz: Week 4:
Assignment 4
(assessment?
name=289)

Week 4
Feedback
Form: The Joy
of Computing
using Python

```

1  def leap_year(year):
2
3      if(year%400 == 0 or year%4 == 0):
4          print("Its a leap year")
5          return
6      else:
7          print("not a leap year")
8          return
9
10     year = int(input("Enter Year: ")) #will convert input into integer
11     leap_year(year)

```

3) What the following code will do?

1 point

```

1  L1 = ['harry potter', 'matrix', 'spiderman', 'avengers', 'john wick']
2  L2= ['drishyam', 'spiderman', 'bahubali', 'dhoom', 'race', 'matrix']
3
4  L = []
5
6
7  for i in range(len(L1)):
8
9      flag = 0
10
11     for j in range(len(L2)):
12
13         if(L1[i] == L2[j]):
14             flag = 1
15             break
16         else:
17             flag = 0
18
19     if(flag == 0):
20         L.append(L1[i])
21
22 print(L)

```

- Print unique movies of list L1
- Print unique movies of list L2
- Print common movies of lists L1 and L2
- Shows an error

Yes, the answer is correct.

Score: 1

Accepted Answers:

Print unique movies of list L1

4) What will be the output of the following code?

1 point

(unit?
unit=78&lesson=103)

- Week 4:
Programming
Assignment 1
(/noc22_cs31/progassgnm
name=311)
 - Week 4:
Programming
Assignment 2
(/noc22_cs31/progassgnm
name=312)

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

- Displays the number of consonants and the name of the movie.
 - Displays the number of letters and the name of the movie.
 - Displays the number of vowels and the name of the movie.
 - Displays the number of special characters and the name of the movie.

Yes, the answer is correct.

Yes, the
Score: 1

Accented Answers:

Displays the number of vowels and the name of the movie

5) What will be the output of the following code?

1 point

Text

Text

Download Videos ()

Books ()

Live Session

11

Programming test -

Session 1

(April 17)

2022-10AM

to 1 PM) ()

```
1 for i in range(5,20):  
2     if(i%5 == 0):  
3         print(i**2)
```

- Print all perfect squares with square roots between 5-20 and divisible by 5.
 - Print all perfect squares with square roots between 5-20 and not divisible by 5.
 - Print all perfect squares with square roots between 5-19 and not divisible by 5.
 - Print all perfect squares with square roots between 5-19 and divisible by 5.

Yes, the answer is correct

Score: 1

Accepted Answers

**Programming
test -
Session 2
(April 17
2022-8 PM to
11 PM) ()**

Print all perfect squares with square roots between 5-19 and divisible by 5.

6) What is the code to generate all prime numbers between 0-100?

1 point

```

1   for i in range(2,101):
2       flag=0
3       for j in range(2, 101):
4           if(i%j == 0):
5               flag=1
6               break
7       if(flag == 0):
8           print(i)

```

```

1   for i in range(2,101):
2       flag=0
3       for j in range(2, i):
4           if(i%j == 0):
5               flag=1
6               break
7       if(flag == 0):
8           print(i)

```

```

1   for i in range(2,101):
2       flag=0
3       for j in range(2, i+1):
4           if(i%j == 0):
5               flag=1
6               break
7       if(flag == 0):
8           print(i)

```

```

1   for i in range(101):
2       flag=0
3       for j in range(2, i):
4           if(i%j == 0):
5               flag=1
6               break
7       if(flag == 0):
8           print(i)

```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```

1  for i in range(2,101):
2      flag=0
3      for j in range(2, i):
4          if(i%j == 0):
5              flag=1
6              break
7      if(flag == 0):
8          print(i)

```

- 7) What is code to replace all the letters of a movie name except special('`', 'White spaces', etc) characters with * in a single line.

1 point

```

1  import string
2  import random
3
4  L = ['spider-man', 'matrix', 'harry potter', 'terminator',
5        'alien isolation', 'resident evil']
6
7  sc = string.ascii_letters+'0123456789'
8
9  movie = random.choice(L)
10
11 for ch in movie:
12     if(ch not in sc):
13         print('*', end='')
14     else:
15         print(ch, end='')

```

```

1  import string
2  import random
3
4  L = ['spider-man', 'matrix', 'harry potter', 'terminator',
5        'alien isolation', 'resident evil']
6
7  sc = string.ascii_letters+'0123456789'
8
9  movie = random.choice(L)
10
11 for ch in movie:
12     if(ch in sc):
13         print('*')
14     else:
15         print(ch)

```

```

1  import string
2  import random
3
4  L = ['spider-man', 'matrix', 'harry potter', 'terminator',
5        'alien isolation', 'resident evil']
6
7  sc = string.ascii_letters+'0123456789'
8
9  movie = random.choice(L)
10
11 for ch in movie:
12     if(ch not in sc):
13         print('*')
14     else:
15         print(ch)

```

```

1 import string
2 import random
3
4 L = ['spider-man', 'matrix', 'harry potter', 'terminator',
5       'alien isolation', 'resident evil']
6
7 sc = string.ascii_letters+'0123456789'
8
9 movie = random.choice(L)
10
11 for ch in movie:
12     if(ch in sc):
13         print('*', end='')
14     else:
15         print(ch, end=' ')

```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```

1 import string
2 import random
3
4 L = ['spider-man', 'matrix', 'harry potter', 'terminator',
5       'alien isolation', 'resident evil']
6
7 sc = string.ascii_letters+'0123456789'
8
9 movie = random.choice(L)
10
11 for ch in movie:
12     if(ch in sc):
13         print('*', end='')
14     else:
15         print(ch, end=' ')

```

8) What's the output of the following code?

1 point

```

1
2 print([i**2 for i in range(10) if i%2 == 0])
3

```

- List of squares of even numbers.
- List of squares of numbers between 0-10.
- List of squares of numbers between 0-9.
- List of squares of odd numbers.

Yes, the answer is correct.

Score: 1

Accepted Answers:

List of squares of even numbers.

9) What's the correct code to calculate the sum of series $1 + (1+2) + (1+2+3) + \dots + n$ terms.

1 point

```
1 num = int(input())
2 total = 0
3
4 for i in range(1,num+1):
5     for j in range(1,i):
6         total = total+j
7
8 print(total)
```

```
1 num = int(input())
2 total = 0
3
4 for i in range(1,num):
5     for j in range(1,i+1):
6         total = total+j
7
8 print(total)
```

```
1 num = int(input())
2 total = 0
3
4 for i in range(1,num+1):
5     for j in range(1,i+1):
6         total = total+j
7
8 print(total)
```

```
num = int(input())
total = 0

for i in range(1,num+1):
    for j in range(1,i+1):

        total = total+j

print(total)
```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```
1 num = int(input())
2 total = 0
3
4 for i in range(1,num+1):
5     for j in range(1,i+1):
6         total = total+j
7
8 print(total)
```

10) A perfect number is a number in which the sum of divisors is equal to that number. **1 point**
For example, 6 is a perfect number as a sum of its divisors 1,2,3 is equal to 6. Which function returns True if the number is a perfect number?

```
1 def perfect_number(num):
2     ans=0
3     for i in range(1,num):
4         if(num%i==0):
5             ans = ans + i
6     if(ans==num):
7         return True
8     else:
9         return False
10
```

```
1 def perfect_number(num):
2     ans=0
3     for i in range(1,num):
4         if(num%i==0):
5             ans+=i
6     if(ans==num):
7         return False
8     else:
9         return True
10
```

```
1 def perfect_number(num):
2     ans=0
3     for i in range(3,num):
4         if(num%i==0):
5             ans = ans + i
6     if(ans==num):
7         return True
8     else:
9         return False
```

```
1  def perfect_number(num):
2      ans=0
3      for i in range(1,num):
4          if(num%i==0):
5              ans = ans + i
6          if(ans!=num):
7              return True
8          else:
9              return False
```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```
1  def perfect_number(num):
2      ans=0
3      for i in range(1,num):
4          if(num%i==0):
5              ans = ans + i
6          if(ans==num):
7              return True
8          else:
9              return False
10
```

X



(https://swayam.gov.in)



(https://swayam.gov.in/nc_details/NPTEL)

abinash123456aks@gmail.com ▾

NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » The Joy of Computing using Python
(course)



Course outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Introduction to
Dictionaries
(unit?
unit=104&lesson=105)

Speech to Text
: No need to
write 01 (unit?
unit=104&lesson=106)

Speech to Text
: No need to

Week 5: Assignment 5

The due date for submitting this assignment has passed.

Due on 2022-03-02, 23:59 IST.

Assignment submitted on 2022-02-20, 18:20 IST

1) What is the syntax to create a dictionary?

1 point

- D = []
- D = {}
- D = ()
- D = dictionary()

Yes, the answer is correct.

Score: 1

Accepted Answers:

D = {}

2) What is the correct statement about dictionaries?

1 point

- There can be multiple same keys.
- Every value must be unique.
- Every key must be unique.
- We can't get every key from the dictionary.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Every key must be unique.

3) What is the correct syntax to get all the keys only from a dictionary d?

1 point

- d.key()

write 02 (unit?
unit=104&lesson=107)

- d.item()
- d.value()
- d.keys()

● Speech to Text
: No need to
write 03 (unit?
unit=104&lesson=108)

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.keys()

○ Monte Hall : 3
doors and a
twist 01 (unit?
unit=104&lesson=109)

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

```
1   d = {'a': 20, 'b': 30}
2
3   print(d.values())
```

○ Monte Hall : 3
doors and a
twist 02 (unit?
unit=104&lesson=110)

- 20 '30'
- '20' '30'
- 20 30
- a b

Yes, the answer is correct.

Score: 1

Accepted Answers:

20 '30'

○ Rock, Paper
and Scissor :
Cheating not
allowed !! 01
(unit?
unit=104&lesson=111)

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

```
1   d = {'a': 20, 'b': 30, 'c': 50}
2
3   print(d.items())
```

○ Rock, Paper
and Scissor :
Cheating not
allowed !! 02
(unit?
unit=104&lesson=112)

- 'a' 'b' 'c'
- 20 30 50
- ('a', 20), ('b', 30), ('c', 50)
- ('a', 'b', 'c') (20, 30, 50)

Yes, the answer is correct.

Score: 1

Accepted Answers:

('a', 20), ('b', 30), ('c', 50)

○ Rock, Paper
and Scissor :
Cheating not
allowed !! 04
(unit?
unit=104&lesson=114)

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

○ Sorting and
Searching : 20
questions
game 01 (unit?
unit=104&lesson=115)

○ Sorting and
Searching : 20
questions
game 02 (unit?
unit=104&lesson=116)

○ Sorting and
Searching : 20

questions
game 03 (unit?
unit=104&lesson=117)

- Sorting and Searching : 20
questions
game 04 (unit?
unit=104&lesson=118)
- Sorting and Searching : 20
questions
game 05 (unit?
unit=104&lesson=119)

- Sorting and Searching : 20
questions
game 06 (unit?
unit=104&lesson=120)

- Sorting and Searching : 20
questions
game 07 (unit?
unit=104&lesson=121)

- Sorting and Searching : 20
questions
game 08 (unit?
unit=104&lesson=122)

**● Quiz: Week 5:
Assignment 5
(assessment?
name=290)**

- Week 5
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=104&lesson=123)

- Week 5:**
Programming
Assignment 1
(/noc22_cs31/progassignment?
name=314)

- Week 5:**
Programming
Assignment 2
(/noc22_cs31/progassignment?
name=315)

```

1 import string
2
3
4 bags = {}
5 name = string.ascii_letters
6
7 for i in range(20):
8     bags[name[i]] = 0
9
10 print(bags)

```

- Creates a dictionary with keys in range 0-19 and values 0
- Creates a dictionary with keys in range a-t and values 0.
- Creates a dictionary with keys in range a-z and values in range 0-19.
- Creates a dictionary with keys in range a-t and values in range 0-19.

Yes, the answer is correct.
Score: 1

Accepted Answers:

Creates a dictionary with keys in range a-t and values 0.

7) What does the following code mimics?

1 point

```

1 import string
2 import random
3
4 bags = {}
5 name = string.ascii_letters
6
7 for i in range(20):
8     bags[name[i]] = 0
9
10 for i in range(1000):
11     key = random.choice(list(bags.keys()))
12     bags[key] = bags[key] + 1

```

- Distribute 1000 marbles evenly in every bag.
- Distribute 500 marbles randomly in every bag.
- Distribute 1000 marbles randomly in every bag.
- Throws an error.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Distribute 1000 marbles randomly in every bag.

8) What is the correct code to choose rock, paper, or scissors correctly?

1 point

Week 5:
Programming
Assignment 3
(/noc22_cs31/progassignment
name=316)

[Week 6 \(\)](#)

[Week 7 \(\)](#)

[Week 8 \(\)](#)

[Week 9 \(\)](#)

[Week 10 \(\)](#)

[Week 11 \(\)](#)

[Week 12 \(\)](#)

[Text
Transcripts \(\)](#)

[Download
Videos \(\)](#)

[Books \(\)](#)

[Live Session
\(\)](#)

**Programming
test -
Session 1
(April 17
2022-10AM
to 1 PM) ()**

**Programming
test -
Session 2
(April 17
2022-8 PM to
11 PM) ()**

```
1 d = {1 : 'Rock', 2 : 'Paper', 3 : 'scissors'}
2
3 choice = int(input())
4
5
6 game_choice = d[choice%3]
```

```
1 d = {0 : 'Rock', 1 : 'Paper', 2 : 'scissors'}
2
3 choice = int(input())
4
5
6 game_choice = d[choice%2]
```

```
1 d = {0 : 'Rock', 1 : 'Paper', 2 : 'scissors'}
2
3 choice = input()
4
5
6 game_choice = d[choice%3]
```

```
1 d = {0 : 'Rock', 1 : 'Paper', 2 : 'scissors'}
2
3 choice = int(input())
4
5
6 game_choice = d[choice%3]
```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```
1 d = {0 : 'Rock', 1 : 'Paper', 2 : 'scissors'}
2
3 choice = int(input())
4
5
6 game_choice = d[choice%3]
```

9) Binary search is applicable in?

1 point

- Unsorted list.
- Only in the list which is sorted in ascending order.
- Only in the list which is sorted in descending order.
- Any sorted list.

Yes, the answer is correct.
Score: 1

Accepted Answers:

Any sorted list.

10) What will be the output of the following code?

1 point

```
1 def test(L):
2
3     for i in range(len(L)-1):
4
5         for j in range(len(L)-1):
6
7             if(L[j] < L[j+1]):
8
9                 temp = L[j]
10                L[j] = L[j+1]
11                L[j+1] = temp
12
13    print(L[0])
```

- The first element of the initial list.
- The largest element of the list.
- The smallest element of the list.
- Throws an error.

Yes, the answer is correct.

Score: 1

Accepted Answers:

The largest element of the list.

X



(https://swayam.gov.in)



(https://swayam.gov.in/nc_details/NPTEL)

abinash123456aks@gmail.com ▾

NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » The Joy of Computing using Python (course)

≡

Course outline

How does an NPTEL online course work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Substitution Cipher -The science of secrecy (unit? unit=124&lesson=125)

Substitution Cipher -The science of secrecy 01

Week 6: Assignment 6

The due date for submitting this assignment has passed.

Due on 2022-03-09, 23:59 IST.

Assignment submitted on 2022-02-26, 19:15 IST

1) The following code will

1 point

```
import string

def shift(word,value):

    letters = string.ascii_lowercase
    new = ''

    for i in range(len(word)):

        if word[i] in letters:

            index = letters.index(word[i])
            new = new + letters[(index+value)%26]

        else:

            new = new + word[i]

    return new
```

(unit?
unit=124&lesson=126)

Substitution
Cipher -The
science of
secrecy 02
(unit?
unit=124&lesson=127)

Substitution
Cipher -The
science of
secrecy 03
(unit?
unit=124&lesson=128)

Tic Tac Toe -
Down the
memory Lane
(unit?
unit=124&lesson=129)

Tic Tac Toe -
Down the
memory Lane
01 (unit?
unit=124&lesson=130)

Tic Tac Toe -
Down the
memory Lane
02 (unit?
unit=124&lesson=131)

Tic Tac Toe -
Down the
memory Lane
03 (unit?
unit=124&lesson=132)

Tic Tac Toe -
Down the
memory Lane
04 (unit?
unit=124&lesson=133)

Tic Tac Toe -
Down the
memory Lane
05 (unit?
unit=124&lesson=134)

Recursion
(unit?
unit=124&lesson=135)

Recursion 01
(unit?
unit=124&lesson=136)

- Shift every letter in a given word by 'value'.
- Shift every letter in a given word by 1.
- Shift every letter in a given word by 26.
- Returns the same word.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Shift every letter in a given word by 'value'.

2) What will be the output of the following code if the input is 'The Joy OF Computing' **1 point**?
?

```

1 import string
2
3 def test(word):
4
5     lower = string.ascii_lowercase
6     upper = string.ascii_uppercase
7
8     new_word = ''
9
10    for ch in word:
11        if(ch in lower):
12            index = lower.index(ch)
13            new_word = new_word + lower[(index+2) % 26]
14
15        elif(ch in upper):
16            index = upper.index(ch)
17            new_word = new_word + upper[(index+3) % 26]
18
19        else:
20            new_word = new_word + ch
21
22    return new_word
23
24 print(test('The Joy OF Computing'))
25

```

- Wjg Mqa Rh Fqorwvkpi
- vjg lqa eh eqorwvkpi
- Wjg Mqa RI Fqorwvkpi
- vjg Mqa RI Fqorwvkpi

Yes, the answer is correct.

Score: 1

Accepted Answers:

Wjg Mqa RI Fqorwvkpi

3) Which of the following is true about recursion? **0 points**

- Recursion increases the speed of the program.
- Recursion decreases the speed of the program.

Recursion 02
(unit?
unit=124&lesson=137)

- Speed of the program remains the same.
- Recursion is easier to understand than non-recursive programs.

Recursion 03
(unit?
unit=124&lesson=138)

No, the answer is incorrect.

Score: 0

Accepted Answers:

Recursion increases the speed of the program.

Recursion 04
(unit?
unit=124&lesson=139)

4) What will be the output of the following program?

0 points

```

1 def recursive(num):
2
3     if(num == 1):
4         return 1
5
6     return num*(num-1)
7

```

Recursion 05
(unit?
unit=124&lesson=140)

Recursion 06
(unit?
unit=124&lesson=141)

**Quiz: Week 6:
Assignment 6
(assessment?
name=291)**

- Calculating sum of first n terms.
- Calculating product of first n terms.
- Calculating power of first n terms.
- Calculating sum of last n terms.

Week 6
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=124&lesson=142)

Yes, the answer is correct.

Score: 0

Accepted Answers:

Calculating product of first n terms.

Week 6:
Programming
Assignment 1
(/noc22_cs31/progassignment?
name=317)

5) What will be the output of the following program?

1 point

Week 6:
Programming
Assignment 2
(/noc22_cs31/progassignment?
name=318)

```

1 def recursive(L):
2
3     if(len(L) == 1):
4         return L[0]
5
6     return L[0] + recursive(L[1:])
7
8 print(recursive([1,2,3,4,5,6,7,8,9,10]))

```

Week 6:
Programming
Assignment 3
(/noc22_cs31/progassignment?
name=319)

55

45

Infinite loop

50

Week 7 ()

Yes, the answer is correct.

Score: 1

Accepted Answers:

55

Week 8 ()

6) What is the output of the following program?

0 points

Week 9 ()

Week 10 ()

[Week 11 \(\)](#)[Week 12 \(\)](#)[Text
Transcripts \(\)](#)[Download
Videos \(\)](#)[Books \(\)](#)[Live Session
\(\)](#)[Programming
test -](#)[Session 1
\(April 17
2022-10AM
to 1 PM\) \(\)](#)[Programming
test -
Session 2
\(April 17
2022-8 PM to
11 PM\) \(\)](#)

```
def recursive(L):
    return L[-1] * recursive(L[:-1])
print(recursive([1,2,3,4,5,6,7,8,9,10]))
```

- 3628800
- Runs into infinite loop
- 55
- Syntax error

Yes, the answer is correct.
Score: 0

Accepted Answers:
Runs into infinite loop

7) What's the correct code for Binary search? 1 point

```
def Binary(L,find, start, end):
    mid = int((start+end)/2)

    if(start < end):
        if(L[end] == find):
            return end
        else:
            return -100

    if(L[mid] == find):
        return mid

    elif(find > L[mid]):
        return Binary(L, find, mid + 1, end)

    else:
        return Binary(L, find, start, mid-1)
```

```
def Binary(L,find, start, end):  
  
    mid = int((start+end)/2)  
  
    if(start == end):  
        if(L[end] == find):  
            return end  
        else:  
            return -100  
  
    if(L[mid] == find):  
        return mid  
  
    elif(find > L[mid]):  
        return Binary(L, find, start, mid - 1)  
  
    else:  
        return Binary(L, find, mid + 1, end)
```

```
def Binary(L,find, start, end):  
  
    mid = int((start+end)/2)  
  
    if(start == end):  
        if(L[end] == find):  
            return end  
        else:  
            return -100  
  
    if(L[mid] == find):  
        return mid  
  
    elif(find > L[mid]):  
        return Binary(L, find, mid + 1, end)  
  
    else:  
        return Binary(L, find, start, mid-1)
```

```
def Binary(L,find, start, end):  
  
    mid = int((start+end)/2)  
  
    if(start >= end):  
        if(L[end] == find):  
            return end  
        else:  
            return -100  
  
    if(L[mid] != find):  
        return mid  
  
    elif(find > L[mid]):  
        return Binary(L, find, mid + 1, end)  
  
    else:  
        return Binary(L, find, start, mid-1)
```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```
def Binary(L, find, start, end):

    mid = int((start+end)/2)

    if(start == end):
        if(L[end] == find):
            return end
        else:
            return -100

    if(L[mid] == find):
        return mid

    elif(find > L[mid]):
        return Binary(L, find, mid + 1, end)

    else:
        return Binary(L, find, start, mid-1)
```

8) What the following code will do?

1 point

```
def recursive(L):

    if(len(L) <= 6):
        return L[-1]

    return L[-1] * recursive(L[:-1])
```

- Returns product of elements from 5th index onwards.
- Returns product of elements from 1st to 5th index.
- Returns product of elements from 6th index onwards.
- Returns product of elements from 4th index onwards.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Returns product of elements from 5th index onwards.

9) A programme which is written in a recursive manner cannot be written in a non-recursive manner.

1 point

- True
- False

Yes, the answer is correct.

Score: 1

Accepted Answers:

False

10) what will be the output of the following program?

1 point

```
1  def recursive(num):
2
3      if(num==1):
4          print('*')
5          return
6
7      if(num%2 == 0):
8          print('*'*num)
9          recursive(num-1)
10     return
11 else:
12     recursive(num-1)
13 return
14
15 recursive(10)
```

**

*

*

 Runs into infinite loop

●

**
*

Yes, the answer is correct.
Score: 1

Accepted Answers:

**
*

X



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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » The Joy of Computing using Python (course)

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Course outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Snakes and
Ladders - Not
on the Board
(unit?
unit=143&lesson=144)

Snakes and
Ladders - Not

Week 7: Assignment 7

The due date for submitting this assignment has passed.

Due on 2022-03-16, 23:59 IST.

Assignment submitted on 2022-03-05, 19:45 IST

1) Values of CSV files are separated by?

1 point

- Commas
- Colons
- Semi-colons
- Slash

Yes, the answer is correct.

Score: 1

Accepted Answers:

Commas

2) What is the output of the following code?

1 point

on the Board -

Part 01 (unit?

unit=143&lesson=145)

Snakes and

Ladders - Not

on the Board -

Part 02 (unit?

unit=143&lesson=146)

Snakes and

Ladders - Not

on the Board -

Part 03 (unit?

unit=143&lesson=147)

Snakes and

Ladders - Not

on the Board -

Part 04 (unit?

unit=143&lesson=148)

Snakes and

Ladders - Not

on the Board -

Part 05 (unit?

unit=143&lesson=149)

Snakes and

Ladders - Not

on the Board -

Part 06 (unit?

unit=143&lesson=150)

Spiral

Traversing -

Let's Animate

(unit?

unit=143&lesson=151)

Spiral

Traversing -

Let's Animate -

Part 01 (unit?

unit=143&lesson=152)

Spiral

Traversing -

Let's Animate -

Part 02 (unit?

unit=143&lesson=153)

Spiral

Traversing -

Let's Animate -

Part 03 (unit?

unit=143&lesson=154)

Spiral

Traversing -

```
def spiral(row, column, arr) :
    rowStart = 0; columnStart = 0

    while (rowStart < row and columnStart < column) :

        for i in range(rowStart, row) :
            print(arr[i][columnStart], end = " ")

        columnStart = columnStart + 1

        for i in range(columnStart, column) :
            print( arr[row - 1][i], end = " ")

        row = row - 1

        if (rowStart < row) :
            for i in range(row - 1, rowStart - 1, -1) :
                print(arr[i][column - 1], end = " ")
            column = column - 1

        if (columnStart < column) :
            for i in range(column - 1, columnStart - 1, -1) :
                print( arr[rowStart][i], end = " ")

        rowStart = rowStart + 1

matrix = [ [ 1, 2, 3 ],
           [ 5, 6, 7 ],
           [ 9, 10, 11 ] ]

row = 3
column= 3

spiral(row, column, matrix)
```

1, 2, 3, 7, 11, 10, 9, 5, 6

1, 2, 3, 5, 6, 7, 9, 10, 11

1, 5, 9, 10, 11, 7, 3, 2, 6

1, 5, 9, 2, 6, 10, 3, 7, 11

Yes, the answer is correct.

Score: 1

Accepted Answers:

1, 5, 9, 10, 11, 7, 3, 2, 6

3) What will be the output of the following code?

1 point

Let's Animate -
Part 04 (unit?
unit=143&lesson=155)

Spiral
Traversing -
Let's Animate -
Part 05 (unit?
unit=143&lesson=156)

Spiral
Traversing -
Let's Animate -
Part 06 (unit?
unit=143&lesson=157)

Spiral
Traversing -
Let's Animate -
Part 07 (unit?
unit=143&lesson=158)

GPS - Track
the route
(unit?
unit=143&lesson=159)

GPS - Track
the route - Part
01 (unit?
unit=143&lesson=160)

GPS - Track
the route - Part
02 (unit?
unit=143&lesson=161)

GPS - Track
the route - Part
03 (unit?
unit=143&lesson=162)

GPS - Track
the route - Part
04 (unit?
unit=143&lesson=163)

Quiz: Week 7:
Assignment 7
(assessment?
name=292)

Week 7
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=143&lesson=164)

```
import turtle

pen = turtle.Turtle()

for i in range(3):
    pen.forward(60)
    pen.right(120)

turtle.done()
```

- Scalar triangle
- Right angle triangle
- Equilateral triangle
- Isosceles triangle

Yes, the answer is correct.

Score: 1

Accepted Answers:
Equilateral triangle

4) Which of the following program will draw a hexagon? 1 point

```
1 import turtle
2
3 pen = turtle.Turtle()
4
5 for i in range(3):
6
7     pen.right(60)
8     pen.forward(60)
9
10 turtle.done()
```

```
1 import turtle
2
3 pen = turtle.Turtle()
4
5 for i in range(3):
6
7     pen.right(60)
8     pen.forward(60)
9     pen.right(60)
10    pen.forward(60)
11
12 turtle.done()
```

Week 7:
Programming
Assignment 1
(/noc22_cs31/progassignment?
name=320)

Week 7:
Programming
Assignment 2
(/noc22_cs31/progassignment?
name=321)

Week 7:
Programming
Assignment 3
(/noc22_cs31/progassignment?
name=322)

Week 8 ()

Week 9 ()

Week 10 ()

Week 11 ()

Week 12 ()

**Text
Transcripts ()**

**Download
Videos ()**

Books ()

**Live Session
()**

**Programming
test -
Session 1
(April 17
2022-10AM
to 1 PM) ()**

**Programming
test -
Session 2
(April 17
2022-8 PM to
11 PM) ()**

```

1 import turtle
2
3 pen = turtle.Turtle()
4
5 for i in range(6):
6
7     pen.right(30)
8     pen.forward(60)
9
10    turtle.done()

```

```

1 import turtle
2
3 pen = turtle.Turtle()
4
5 for i in range(6):
6
7     pen.right(30)
8     pen.forward(30)
9
10    turtle.done()

```

Yes, the answer is correct.
Score: 1

Accepted Answers:

```

1 import turtle
2
3 pen = turtle.Turtle()
4
5 for i in range(3):
6
7     pen.right(60)
8     pen.forward(60)
9     pen.right(60)
10    pen.forward(60)
11
12    turtle.done()

```

5) Which of the following library is used to render data on google maps?

1 point

- gplot
- googlemaps
- gmplot
- gmeplot

Yes, the answer is correct.

Score: 1

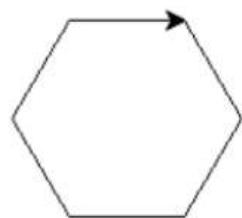
Accepted Answers:

gmplot

6) What is the output of the following code?

1 point

```
1 import turtle  
2  
3 pen = turtle.Turtle()  
4  
5 for i in range(3):  
6  
7     pen.right(60)  
8     pen.forward(60)  
9     pen.penup()  
10    pen.right(60)  
11    pen.forward(60)  
12    pen.pendown()  
13  
14  
15 turtle.done()
```



Yes, the answer is correct.

Score: 1

Accepted Answers:



7) Which turtle command is equivalent to lifting up a pen.

1 point

- penlift()
- penup()
- uppen()
- penremove()

Yes, the answer is correct.

Score: 1

Accepted Answers:

penup()

8) Why do we use functions?

1 point

- To improve readability.
- To reuse code blocks.
- For the ease of code debugging.
- All of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

All of the above

9) Library used to import images?

1 point

- PIL
- Imageview
- IMG
- image

Yes, the answer is correct.

Score: 1

Accepted Answers:

PIL

10) In snakes and ladder what can be the ways to track ladders and snakes?

1 point

- Maintain a dictionary with snakes or ladder number blocks as keys.
- Using the if condition to check on every number.
- Both A and B.
- None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

Both A and B.

X



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(course)

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Course
outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Tuples- Python
Data Structure
(unit?
unit=165&lesson=166)

Week 8: Assignment 8

The due date for submitting this assignment has passed.

Due on 2022-03-23, 23:59 IST.

Assignment submitted on 2022-03-13, 06:13 IST

1) What is the correct initialisation of tuples?

1 point

- Dates = [12,23,3,4]
- Dates = (12,23,3,4)
- Dates = {12,23,3,4}
- Both B and C

Yes, the answer is correct.

Score: 1

Accepted Answers:

Dates = (12,23,3,4)

2) What operations can be done on tuples?

1 point

- Tuples are appendable.
- We can delete a value from tuples.
- Both A and B.
- We can count the number of instances of an element.

Yes, the answer is correct.

Score: 1

Accepted Answers:

We can count the number of instances of an element.

3) What will be the output of the following code?

1 point

Lottery
Simulation -
Profit or Loss
(unit?
unit=165&lesson=167)

Lottery
Simulation -
Profit or Loss -
Part 01 (unit?
unit=165&lesson=168)

Lottery
Simulation -
Profit or Loss -
Part 02 (unit?
unit=165&lesson=169)

Lottery
Simulation -
Profit or Loss -
Part 03 (unit?
unit=165&lesson=170)

Lottery
Simulation -
Profit or Loss -
Part 04 (unit?
unit=165&lesson=171)

Lottery
Simulation -
Profit or Loss -
Part 05 (unit?
unit=165&lesson=172)

Lottery
Simulation -
Profit or Loss -
Part 06 (unit?
unit=165&lesson=173)

Image
Processing -
Enhance your
images (unit?
unit=165&lesson=174)

Image
Processing -
Enhance your
images - Part
01 (unit?
unit=165&lesson=175)

Image
Processing -
Enhance your
images - Part

```
t = (1,2,3,4,5)

for i in range(-1,-len(t), -1):
    print(t[i])
```

- 1,2,3,4,5
- 5,4,3,2,1
- 5,4,3,2
- 1,2,3,4

Yes, the answer is correct.
Score: 1

Accepted Answers:
5,4,3,2

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

```
1 word = 'facebook'
2 new = ''
3
4 for w in word:
5     i = ord(w)
6     j = ((( i+26 ) - 97 ) % 26 ) + 97
7     new = new + chr(j)
8
9
10 print(new)
```

- facebook
- gbdfcpll
- ezbdbannj
- ytvxuhhd

Yes, the answer is correct.
Score: 1

Accepted Answers:
facebook

5) When the following program will clap? 1 point

```
1 print('Enter a letter between a-z')
2
3 player1 = str(input())
4 player2 = str(input())
5
6 while(True):
7
8     if(ord(player1.lower())+1 == ord(player2.lower())):
9         print('clap')
10        break
11     else:
12         player1 = str(input())
13         player2 = str(input())
```

- When both players will enter the same letters.
- When player 2 will enter the next letter with respect to player 1.

02 (unit?
unit=165&lesson=176)

- When player 1 will enter the next letter with respect to player 2.
- It will never clap.

● **Image**

Processing -
Enhance your
images - Part
03 (unit?
unit=165&lesson=177)

Yes, the answer is correct.

Score: 1

Accepted Answers:

When player 2 will enter the next letter with respect to player 1.

○ **Anagrams**

(unit?
unit=165&lesson=178)

○ **Anagrams -**

Part 01 (unit?
unit=165&lesson=179)

○ **Anagrams -**

Part 02 (unit?
unit=165&lesson=180)

○ **Anagrams -**

Part 03 (unit?
unit=165&lesson=181)

○ **Facebook**

Sentiment
Analysis (unit?
unit=165&lesson=182)

● **Facebook**

Sentiment
Analysis - Part
01 (unit?
unit=165&lesson=183)

● **Facebook**

Sentiment
Analysis - Part
02 (unit?
unit=165&lesson=184)

● **Facebook**

Sentiment
Analysis - Part
03 (unit?
unit=165&lesson=185)

○ **Facebook**

Sentiment
Analysis - Part
04 (unit?
unit=165&lesson=186)

● **Quiz: Week 8:**

Assignment 8
(assessment?
name=293)

- 6) Which statement is correct about the following program? **1 point**

```

1 import random
2 import matplotlib.pyplot as plt
3
4 l = []
5 count = 0
6
7 for i in range(10):
8     guess = random.randint(1, 10)
9     pick = random.randint(1, 10)
10
11     if(guess!=pick):
12         count+=1
13         l.append(count)
14     else:
15         count-=1
16         l.append(count)
17
18 plt.plot(l)
19 plt.show()

```

- The graph will go up when guess and pick are the same.
- The graph will go down when guess and pick are the same.
- The graph will go up when guess and pick are not the same.
- Both B and C

Yes, the answer is correct.

Score: 1

Accepted Answers:

Both B and C

- 7) What does NLTK do? **1 point**

- Helps to work with human language data.
- Helps to convert machine data into human language.
- Helps to work on gibberish language.
- Helps to translate dog language into human language.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Helps to work with human language data.

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

Week 8
 Feedback
 Form: The Joy
 of Computing
 using Python
 (unit?
 unit=165&lesson=187)

Week 8:
 Programming
 Assignment 1

(/noc22_cs31/progassignment? name=323)
 ['!', 'e', 'e', 'e', 'h', 'h', 'r', 't', 'y']

- ['h', 'e', 'y', '!', 't', 'h', 'e', 'r', 'e']
- ['y', 't', 'r', 'h', 'h', 'e', 'e', 'e', '!']
- None of the above

Week 8:
 Programming
 Assignment 2

(/noc22_cs31/progassignment? name=324)
 Yes, the answer is correct.
 Score: 1

Week 8:
 Programming

Assignment 3
 (/noc22_cs31/progassignment? name=325)
 While converting an image into black and white during enhancement you cannot
 Convert it back into a colored image.

1 point

- True
- False

Week 9 ()

Week 10 ()

Week 11 ()

Week 12 ()

10) The following code will

1 point

Text

Transcripts ()

**Download
 Videos ()**

Books ()

**Live Session
 ()**

**Programming
 test -
 Session 1
 (April 17
 2022-10AM
 to 1 PM) ()**

**Programming
 test -
 Session 2**

```
def test(word):
    new_word = ''
    for ch in word:
        if ch>='a' and ch<='z':
            temp = ord(ch)
            temp = temp - 32
            temp = chr(temp)
            new_word = new_word + temp
    return new_word
```

- Converting lower case letters into upper case.

(April 17
2022-8 PM to
11 PM) ()

- Converting upper case letters into lower case.
- Return the same word
- Error

Yes, the answer is correct.
Score: 1

Accepted Answers:

Converting lower case letters into upper case.

X



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(https://swayam.gov.in/nc_details/NPTEL)

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(course)

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Course
outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

• Natural
Language
Processing -
Author

Week 9: Assignment 9

The due date for submitting this assignment has passed.

Due on 2022-03-30, 23:59 IST.

Assignment submitted on 2022-03-20, 21:43 IST

1) How can we identify which book is written by which author? 1 point

- By matching handwriting.
- By analyzing word length with previous books.
- By analyzing the number of pages in a book.
- By analyzing the book's preface.

Yes, the answer is correct.

Score: 1

Accepted Answers:

By analyzing word length with previous books.

2) How can a list L can be converted into a tuple? 1 point

- tuple(L)
- tup(L)
- L(tuple)
- L(tup)

Yes, the answer is correct.

Score: 1

Accepted Answers:

tuple(L)

3) Will the following piece of code always return True? 1 point

Stylometry

(unit?

unit=188&lesson=189)

```

4   G = nx.gnp_random_graph(10, 0.5)
5   print(nx.is_connected(G))

```

- Natural
Language
Processing -
Author
Stylometry -
Part 01 (unit?
unit=188&lesson=190)

True
 False

No, the answer is incorrect.

Score: 0

Accepted Answers:
False

- Natural
Language
Processing -
Author
Stylometry -
Part 02 (unit?
unit=188&lesson=191)

4) What is the output of the following code?

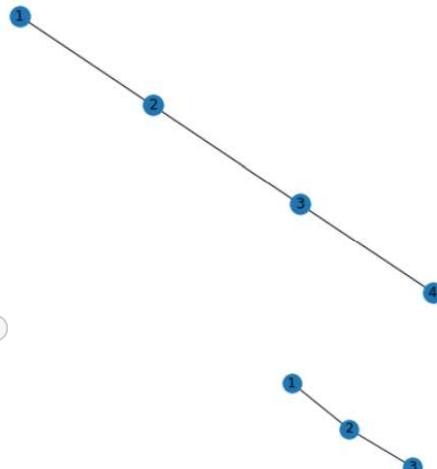
1 point

```

1 import networkx as nx
2 import matplotlib.pyplot as plt
3
4
5 G = nx.Graph()
6 G.add_nodes_from([1, 2, 3, 4])
7 G.add_edges_from([(1, 2), (2, 1), (2, 3), (3, 4), (4, 1), (3, 1)])
8
9 nx.draw(G, with_labels=True)
10 plt.show()

```

- Natural
Language
Processing -
Author
Stylometry -
Part 03 (unit?
unit=188&lesson=192)



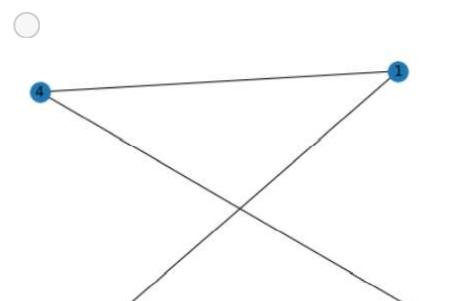
- Natural
Language
Processing -
Author
Stylometry -
Part 04 (unit?
unit=188&lesson=193)

- Natural
Language
Processing -
Author
Stylometry -
Part 05 (unit?
unit=188&lesson=194)

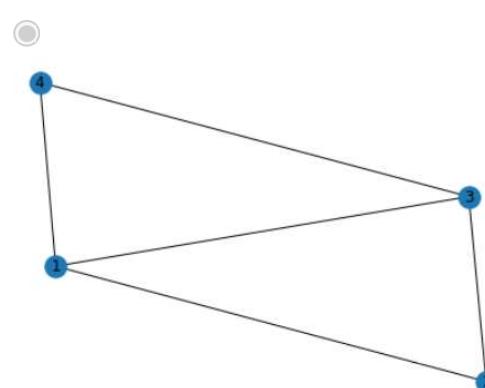
- Natural
Language
Processing -
Author
Stylometry -
Part 06 (unit?
unit=188&lesson=195)

- Natural
Language
Processing -
Author
Stylometry -
Part 07 (unit?
unit=188&lesson=196)

Natural Language Processing - Author Stylometry - Part 08 (unit? unit=188&lesson=197)



Natural Language Processing - Author Stylometry - Part 09 (unit? unit=188&lesson=198)



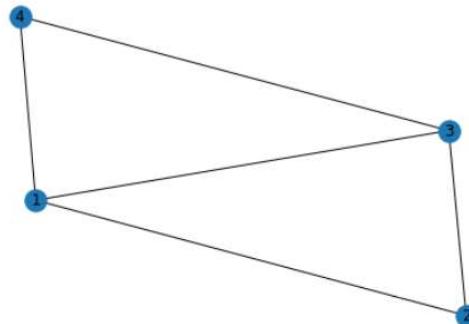
Natural Language Processing - Author Stylometry - Part 10 (unit? unit=188&lesson=199)

Introduction to Networkx - Part 01 (unit? unit=188&lesson=200)

Yes, the answer is correct.

Score: 1

Accepted Answers:



Introduction to Networkx - Part 02 (unit? unit=188&lesson=201)

Six Degrees of Separation : Meet your favourites (unit? unit=188&lesson=202)

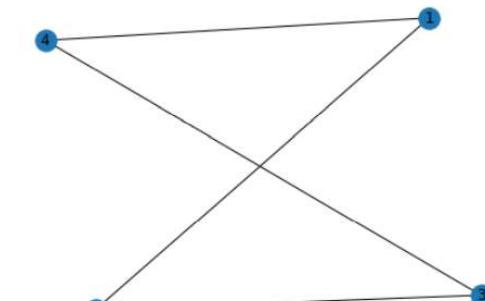
Six Degrees of Separation : Meet your favourites - Part 01 (unit? unit=188&lesson=203)

Six Degrees of Separation : Meet your favourites - Part 02 (unit? unit=188&lesson=204)

Six Degrees of Separation : Meet your favourites -

5) How many edges are there in the following graph?

1 point



- 4
- 5
- 3
- 2

Part 03 (unit?
unit=188&lesson=205)

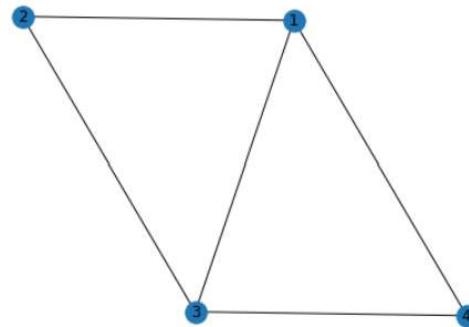
Yes, the answer is correct.
Score: 1

Accepted Answers:

4

6) How many neighbors does node 3 have?

1 point



- 2
- 4
- 1
- 3

Yes, the answer is correct.
Score: 1

Accepted Answers:

3

7) In which of the following ways can we create a string in python?

1 point

- By using single quotes.
- By using double-quotes.
- By using triple-quotes.
- All of the above.

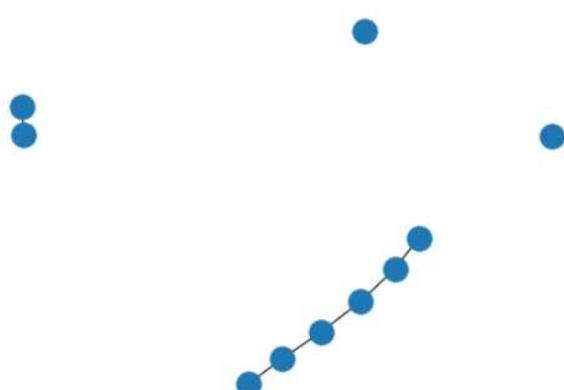
Yes, the answer is correct.
Score: 1

Accepted Answers:

All of the above.

8) How many nodes, edges does the following graph have?

1 point



Area
Calculation -
Don't Measure
(unit?
unit=188&lesson=206)

Area
Calculation -
Don't Measure
- Part 01 (unit?
unit=188&lesson=207)

Area
Calculation -
Don't Measure
- Part 02 (unit?
unit=188&lesson=208)

Area
Calculation -
Don't Measure
- Part 03 (unit?
unit=188&lesson=209)

Area
Calculation -
Don't Measure
- Part 04 (unit?
unit=188&lesson=210)

Area
Calculation -
Don't Measure
- Part 05 (unit?
unit=188&lesson=211)

Area
Calculation -
Don't Measure
- Part 06 (unit?
unit=188&lesson=212)

Quiz: Week 9:
Assignment 9
(assessment?
name=294)

Week 9
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=188&lesson=213)

Week 9:
Programming

Assignment 1
(/noc22_cs31/progassignment?
name=326)

- 10,6
- 10,5
- 8,6
- 8,5

Week 9:
Programming

Assignment 2
(/noc22_cs31/progassignment?
name=327)

Score: 1
Accepted Answers:

10,6

Week 9:

Programming
Assignment 3

(/noc22_cs31/progassignment?
name=328)

- 1
- 2
- 3
- Depends on the number of nodes.

Week 10 ()

Week 11 ()

Week 12 ()

Text

Transcripts ()

**Download
Videos ()**

Books ()

**Live Session
()**

**Programming
test -
Session 1
(April 17
2022-10AM
to 1 PM) ()**

**Programming
test -
Session 2
(April 17
2022-8 PM to
11 PM) ()**

Yes, the answer is correct.

Score: 1

Accepted Answers:

10,6

9) A complete graph will have a degree of separation? **1 point**

- 1
- 2
- 3
- Depends on the number of nodes.

Yes, the answer is correct.

Score: 1

Accepted Answers:

1

10) How can we get an RGB of a pixel? **1 point**

- RGB()
- getpixel()
- getvalue()
- getrbg()

Yes, the answer is correct.

Score: 1

Accepted Answers:

getpixel()

X



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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » The Joy of Computing using Python (course)

≡

Course outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

Week 10 ()

Week 10: Assignment 10

The due date for submitting this assignment has passed.

Due on 2022-04-06, 23:59 IST.

Assignment submitted on 2022-03-28, 10:00 IST

1) What is the output of the following code?

1 point

```
1     s = 'Hello Everyone'
2     print(s.lower())
3
```

- HELLO EVERYONE
- Hello Everyone
- helloeveryone
- hello everyone

Yes, the answer is correct.

Score: 1

Accepted Answers:

hello everyone

2) type(9) will return?

1 point

- float
- int
- str
- class

Yes, the answer is correct.

Score: 1

Accepted Answers:

FLAMES -
Part 01 (unit?
unit=214&lesson=215)

int

3) Output of the following code will be?

1 point

FLAMES -
Part 02 (unit?
unit=214&lesson=216)

```
1     a = ['h', 'e', 'l', 'l', 'o']
2     print(''.join(a))
```

FLAMES -
Part 03 (unit?
unit=214&lesson=217)

- hello
- h.e.l.l.o
- .h.e.l..l.o
- .h.e.l.l.o

Yes, the answer is correct.

Score: 1

Accepted Answers:

.h.e.l..l.o

FLAMES -
Part 04 (unit?
unit=214&lesson=218)

4) Which code snippet represent replacing all vowels with '_' in a string?(suppose string name is **s**)**1 point**

Data
Compression -

Part 01 (unit?
unit=214&lesson=221)

```
1     s='The joy of Computing'
2
3     s.replace('a', '_')
4     s.replace('e', '_')
5     s.replace('i', '_')
6     s.replace('i', '_')
7     s.replace('o', '_')
8     s.replace('u', '_')
9
10    print(s)
```

Data
Compression -
Part 02 (unit?
unit=214&lesson=222)

Data
Compression -
Part 03 (unit?
unit=214&lesson=223)

Data
Compression -
Part 04 (unit?
unit=214&lesson=224)

Data
Compression -
Part 05 (unit?
unit=214&lesson=225)

**Quiz: Week
10:
Assignment
10
(assessment?
name=295)**

**Week 10:
Programming
Assignment 1
(/noc22_cs31/progassignment?
name=329)**

- Week 10:
Programming Assignment 2
(/noc22_cs31/progassignment
name=331)
- Week 10:
Programming Assignment 3
(/noc22_cs31/progassignment
name=332)

Week 10
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=214&lesson=226)

[Week 11 \(\)](#)

[Week 12 \(\)](#)

[Text](#)

[Transcripts \(\)](#)

[Download
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[Books \(\)](#)

[Live Session
\(\)](#)

[Programming
test -
Session 1
\(April 17
2022-10AM
to 1 PM\) \(\)](#)

[Programming
test -
Session 2
\(April 17
2022-8 PM to
11 PM\) \(\)](#)

```

1 s='The joy of Computing'
2
3 s = s.replace('_', 'a')
4 s = s.replace('_', 'e')
5 s = s.replace('_', 'i')
6 s = s.replace('_', 'o')
7 s = s.replace('_', 'u')
8
9 print(s)

```

```

1 s='The joy of Computing'
2
3 s = s.replace('a', '_')
4 s = s.replace('e', '_')
5 s = s.replace('i', '_')
6 s = s.replace('o', '_')
7 s = s.replace('u', '_')
8
9 print(s)

```

Yes, the answer is correct.

Score: 1

Accepted Answers:

```

1 s='The joy of Computing'
2
3 s = s.replace('a', '_')
4 s = s.replace('e', '_')
5 s = s.replace('i', '_')
6 s = s.replace('o', '_')
7 s = s.replace('u', '_')
8
9 print(s)

```

5) What will be the output of the following list slicing.

1 point

```

1 s = 'The Joy of Computing'
2
3 print(s[3:12])

```

- 'Joy of C'
- ' Joy of C'
- 'Joy of Co'
- ' Joy of Co'

Yes, the answer is correct.

Score: 1

Accepted Answers:

'Joy of C'

6) What does the following code represent?

1 point

```

1  s = 'Sheher mein'
2  a = 'aeiouAEIOU'
3  for i in range(len(s)):
4      if(s.index(s[i])%2 == 0):
5          print(i)
6          if(s[i] in a):
7              s = s.replace(s[i], '_')
8
9
10 print(s)

```

- Replacing all letters at odd index with '_'.
- Replacing all vowels at odd index with '_'.
- Replacing all vowels at even index with '_'.
- Replacing all letters at even index with '_'.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Replacing all vowels at even index with '_'

7) What will be the output of the following code?

1 point

```

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

```

- [4 6]
- [3 7]
- [3 4]
- None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

[3 7]

8) How to take a transpose of a matrix?

1 point

```

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

```

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

Yes, the answer is correct.

Score: 1

Accepted Answers:

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

OR

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

9) Lossy and Lossless compressions are the same?

1 point

- True
- False

Yes, the answer is correct.

Score: 1

Accepted Answers:

False

10) What is the shape of the following numpy array?

1 point

`numpy.array([[1,2,3], [4,5,6]])`

- (2,3)
- (3,2)
- (3,3)
- (2,2)

Yes, the answer is correct.

Score: 1

Accepted Answers:

(2,3)

X



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Course outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

Week 10 ()

Week 11 ()

Week 11: Assignment 11

The due date for submitting this assignment has passed.

Due on 2022-04-13, 23:59 IST.

Assignment submitted on 2022-04-10, 09:44 IST

Note: use the following convention for the rest of the assignment.

dd - date
mm - month
yy - year
hh - hour
MM - minutes
ss - seconds
ms - milli-seconds

1) Which library is used for browser automation?

1 point

- nltk
- numpy
- selenium
- PIL

Yes, the answer is correct.
Score: 1

Accepted Answers:
selenium

2) time.time() will return?

1 point

- Time in seconds.

<input checked="" type="radio"/> Browser Automation Watsapp using Python - Part 01 (unit? unit=227&lesson=228)	<input type="radio"/> Current date and time. <input type="radio"/> Time in minutes <input type="radio"/> The current date, time and year.	Yes, the answer is correct. Score: 1 Accepted Answers: <i>Time in seconds.</i>	
<input checked="" type="radio"/> Browser Automation Watsapp using Python - Part 02 (unit? unit=227&lesson=229)	3) Library used to get all timezones? <input type="radio"/> selenium <input type="radio"/> calender <input type="radio"/> nltk <input checked="" type="radio"/> pytz		1 point
<input type="radio"/> Browser Automation Watsapp using Python - Part 03 (unit? unit=227&lesson=230)	Yes, the answer is correct. Score: 1 Accepted Answers: <i>pytz</i>		
<input type="radio"/> Browser Automation Watsapp using Python - Part 04 (unit? unit=227&lesson=231)	4) The output of the following code will be? <pre>1 from datetime import datetime as dt 2 3 print(dt.now())</pre>		1 point
<input type="radio"/> Fun with Calendar - Part 01 (unit? unit=227&lesson=232)	<input type="radio"/> Date and time in dd- mm-yy hh:MM:ss:ms respectively. <input type="radio"/> Time and date in hh:MM:ss:ms dd- mm-yy respectively. <input type="radio"/> Date and time in mm-dd-yy hh:MM:ss:ms respectively. <input checked="" type="radio"/> Date and time in yy- mm-dd hh:MM:ss:ms respectively.		
<input type="radio"/> Fun with Calendar - Part 02 (unit? unit=227&lesson=233)	Yes, the answer is correct. Score: 1		
<input type="radio"/> Fun with Calendar - Part 03 (unit? unit=227&lesson=234)	Accepted Answers: <i>Date and time in yy- mm-dd hh:MM:ss:ms respectively.</i>		
<input type="radio"/> Fun with Calendar - Part 04 (unit? unit=227&lesson=235)	5) We can use the same web drivers for different browsers. <input type="radio"/> True <input checked="" type="radio"/> False		1 point
<input type="radio"/> Fun with Calendar - Part 05 (unit? unit=227&lesson=236)	Yes, the answer is correct. Score: 1		
<input type="radio"/> Fun with Calendar - Part 06 (unit? unit=227&lesson=237)	Accepted Answers: <i>False</i>		
<input type="radio"/> Fun with Calendar -	6) What will be the output of the following code?		1 point

Part 07 (unit?
unit=227&lesson=238)

- Fun with
Calendar -
Part 08 (unit?
unit=227&lesson=239)
- Fun with
Calendar -
Part 09 (unit?
unit=227&lesson=240)
- Fun with
Calendar -
Part 10 (unit?
unit=227&lesson=241)
- Fun with
Calendar -
Part 11 (unit?
unit=227&lesson=242)
- Fun with
Calendar -
Part 12 (unit?
unit=227&lesson=243)

```

1 import pytz
2 from datetime import datetime as dt
3
4 zone = pytz.all_timezones
5
6 for i in range(len(zone)):
7     print(dt.now(pytz.timezone(zone[i])))
8

```

- Print the current date and time of all time zones.
- Print the current date and time of specific time zones.
- Print the current date of all time zones.
- Print the current date of some specific time zones.

Yes, the answer is correct.
Score: 1

Accepted Answers:

Print the current date and time of all time zones.

7) What will be the output if the system date is 10 December 2021(Friday)?

1 point

```

2 from datetime import datetime as dt
3
4 day = dt.today()
5
6 print(day.weekday())

```

- 5
- 3
- 4
- error

Yes, the answer is correct.
Score: 1

Accepted Answers:

4

8) Which statement will return the calendar for a whole year?

1 point

- calendar.month(year)
- calendar(year)
- calendar.prcal(year)
- calendar.year(year)

Yes, the answer is correct.
Score: 1

Accepted Answers:

calendar.prcal(year)

9) By which statement we can come out from the loop?

1 point

- continue

Week 12 ()**Text
Transcripts ()****Download
Videos ()****Books ()****Live Session
()****Programming
test -
Session 1
(April 17
2022-10AM
to 1 PM) ()****Programming
test -
Session 2
(April 17
2022-8 PM to
11 PM) ()** leave catch break

Yes, the answer is correct.

Score: 1

Accepted Answers:

break

10) How to check for the leap year?

1 point calendar.leap(year) calendar.is_leap(year) calendar.isleap(year) calendar.checkleap(year)

Yes, the answer is correct.

Score: 1

Accepted Answers:

calendar.isleap(year)

X



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(course)

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Course
outline

How does an
NPTEL
online
course
work? ()

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

Week 8 ()

Week 9 ()

Week 10 ()

Week 11 ()

Week 12: Assignment 12

The due date for submitting this assignment has passed.

Due on 2022-04-20, 23:59 IST.

Assignment submitted on 2022-04-17, 16:08 IST

1) What is a sink?

1 point

- A node with no incoming edges.
- A node with maximum incoming edges.
- A node with maximum outgoing edges.
- A node with no outgoing edges.

Yes, the answer is correct.

Score: 1

Accepted Answers:

A node with no outgoing edges.

2) What should we do when encountered a sink?

1 point

- Stop the algorithm.
- Start with the last node.
- Randomly choose a node from all nodes.
- Randomly choose a node from neighbor nodes.

Yes, the answer is correct.

Score: 1

Accepted Answers:

Randomly choose a node from all nodes.

3) In the page rank algorithm

1 point

- We randomly travel from node to node without any relationship.

Week 12 ()

Page Rank -
How does
Google Work ?
- Part 01 (unit?
unit=245&lesson=246)

Page Rank -
How does
Google Work ?
- Part 02 (unit?
unit=245&lesson=247)

Page Rank -
How does
Google Work ?
- Part 03 (unit?
unit=245&lesson=248)

Page Rank -
How does
Google Work ?
- Part 04 (unit?
unit=245&lesson=249)

Page Rank -
How does
Google Work ?
- Part 05 (unit?
unit=245&lesson=250)

Page Rank -
How does
Google Work ?
- Part 06 (unit?
unit=245&lesson=251)

Page Rank -
How does
Google Work ?
- Part 07 (unit?
unit=245&lesson=252)

Page Rank -
How does
Google Work ?
- Part 08 (unit?
unit=245&lesson=253)

Page Rank -
How does
Google Work ?
- Part 09 (unit?
unit=245&lesson=254)

Page Rank -
How does
Google Work ?

- We randomly travel from node to neighbor node.
- The maximum visited node will be the leader.
- B and C
- A and C

Yes, the answer is correct.
Score: 1

Accepted Answers:
B and C

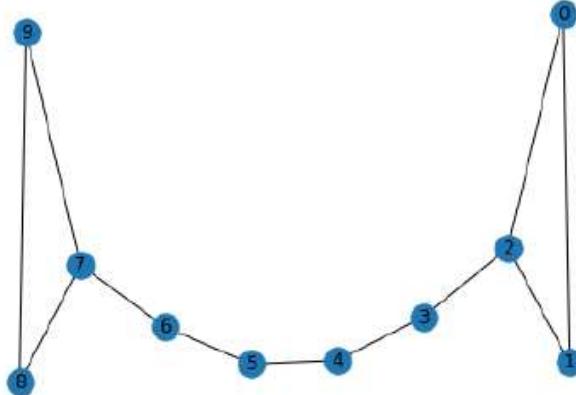
4) If we perform the page rank algorithm on the web as a graph, which of the following **1 point** is true?

- Websites are nodes and hyperlinks in websites are edges.
- Hyperlinks in websites are nodes and websites are edges.
- Websites will work as nodes and edges.
- Hyperlinks will work as nodes and edges.

Yes, the answer is correct.
Score: 1

Accepted Answers:
Websites are nodes and hyperlinks in websites are edges.

5) Which is the following graph? **1 point**



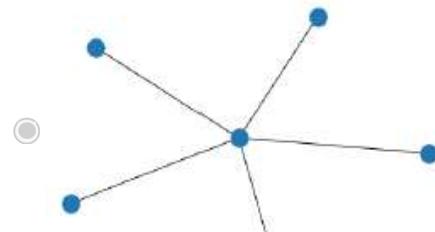
- Triangle Graph
- Directed Graph
- Barbell Graph
- Wheel graph

Yes, the answer is correct.
Score: 1

Accepted Answers:
Barbell Graph

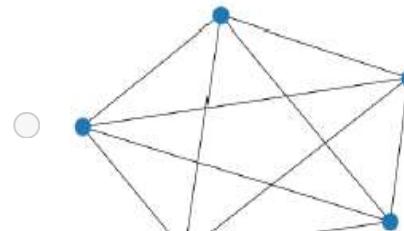
6) Which of the following is a star graph of node 5? **1 point**

- Part 10 (unit?
unit=245&lesson=255)



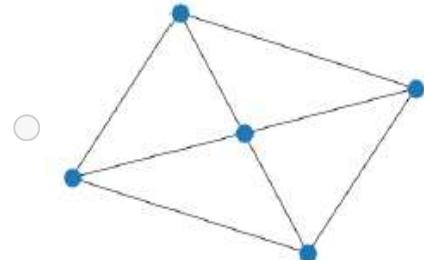
○ Page Rank -
How does
Google Work ?
- Part 11 (unit?
unit=245&lesson=256)

○ Page Rank -
How does
Google Work ?
- Part 12 (unit?
unit=245&lesson=257)



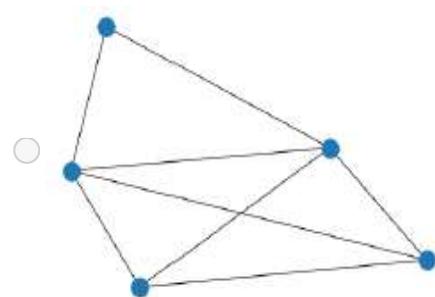
○ Page Rank -
How does
Google Work ?
- Part 13 (unit?
unit=245&lesson=258)

○ Page Rank -
How does
Google Work ?
- Part 14 (unit?
unit=245&lesson=259)



○ Page Rank -
How does
Google Work ?
- Part 15 (unit?
unit=245&lesson=260)

○ Page Rank -
How does
Google Work ?
- Part 16 (unit?
unit=245&lesson=261)



○ Collatz
Conjecture -
Part 01 (unit?
unit=245&lesson=262)

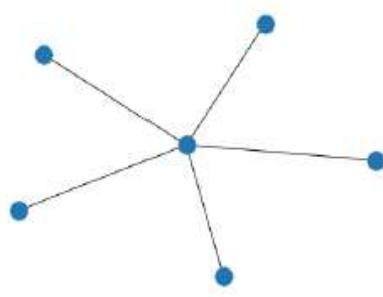
Yes, the answer is correct.

Score: 1

Accepted Answers:

○ Collatz
Conjecture -
Part 02 (unit?
unit=245&lesson=263)

○ JOC
Conclusion
(unit?
unit=245&lesson=264)



● Quiz: Week
12:
Assignment
12
(assessment?
name=345)

Week 12:
Programming
Assignment 1
(/noc22_cs31/progassgnr
name=346)

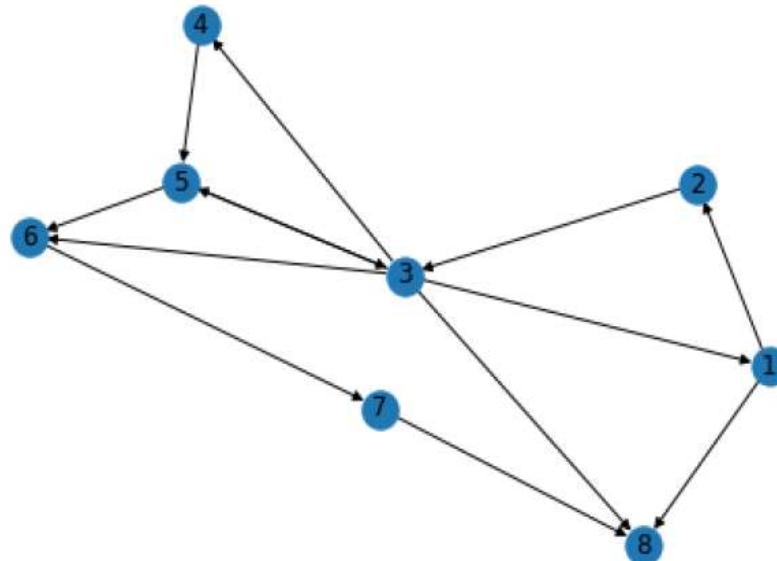
Week 12:
Programming
Assignment 2
(/noc22_cs31/progassgnr
name=347)

Week 12:
Programming
Assignment 3
(/noc22_cs31/progassgnr
name=348)

Week 12
Feedback
Form: The Joy
of Computing
using Python
(unit?
unit=245&lesson=265)

7) What will be the G.out_degree(3) for the following graph(G) ?

1 point



- 4
- 5
- 3
- 6

Yes, the answer is correct.
Score: 1

Accepted Answers:

5

8) In the page rank algorithm the leader is decided by?

1 point

- A node(person) with maximum number of outgoing edges.
- A node(person) with maximum number of incoming edges.
- A node(person) which is visited maximum times.
- Can not decide.

Yes, the answer is correct.
Score: 1

Accepted Answers:

A node(person) which is visited maximum times.

9) Which of the following is true about directed graphs?

1 point

- One can come back and forth from one node to another using a single edge.
- One can only go forward from one node to another using a single edge.
- One can go to any node from one node using one edge.
- None of the above.

Yes, the answer is correct.
Score: 1

Accepted Answers:

One can only go forward from one node to another using a single edge.

10) What will be the output of the following code?

1 point

```
1 word = 'Hey there!'
2 print(list(word))
```

- ['Hey', 'there', '!']
- ['Hey', 'there', ',', '!']
- ['H', 'e', 'y', ' ', 't', 'h', 'e', 'r', 'e', '!']
- ['H', 'e', 'y', 't', 'h', 'e', 'r', 'e', '!']

Yes, the answer is correct.

Score: 1

Accepted Answers:

['H', 'e', 'y', ' ', 't', 'h', 'e', 'r', 'e', '!']