Day 1

1. What is the output of the following program :

|  |
| --- |
| i = 0  while i < 3:  print(i)  i++  print(i+1) |

1. 0 2 1 3 2 4
2. 0 1 2 3 4 5
3. Error
4. 1 0 2 4 3 5

Answer: C

Explanation: There is no operator ++ in Python

2. To start Python from the command prompt, use the command \_\_\_\_\_\_

1. execute python
2. go python
3. python
4. run python

Answer: C

3. Which of the following function convert a string to a float in python?

1. int(x [,base])
2. long(x [,base] )
3. float(x)
4. str(x)

Answer: C

Explanation: float(x) − Converts x to a floating-point number

4. Predict the output of following python program:

a = True

b = False

c = False

if not a or b:

print(1)

elif not a or not b and c:

print(2)

elif not a or b or not b and a:

print(3)

else:

print(4)

1. 1
2. 2
3. 3
4. 4

Answer: C

Explanation: In Python the precedence order is first NOT then AND and in last OR. So the if condition and second elif condition evaluates to False while third elif condition is evaluated to be True resulting in 3 as output.

5. Predict the output of following python program:

for i in range(2):

print(i)

for i in range(4,6):

print(i)

1. 0 1 4 5
2. 1 2 4 5 6
3. 0 1 4 5 6
4. 1 2 4 5

Answer: A

Explanation: If only single argument is passed to the range method, Python considers this argument as the end of the range and the default start value of range is 0. So, it will print all the numbers starting from 0 and before the supplied argument.

For the second for loop the starting value is explicitly supplied as 4 and ending is 5.

<https://docs.google.com/forms/d/1efBtED1FgS2vVCUQ2Bh9o3VqxzpWe8ePOKD-gxNwrng/edit?usp=sharing>

Day 2

Ques 1. Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is list1 after list1.pop(1)?

1. [3, 4, 5, 20, 5, 25, 1, 3]
2. [1, 3, 3, 4, 5, 5, 20, 25]
3. [3, 5, 20, 5, 25, 1, 3]
4. [1, 3, 4, 5, 20, 5, 25]

Answer: C

Explanation: pop(i) removes the ith index element from the list

2. What is the output of the following program:

|  |
| --- |
| print "Hello World"[::-1] |

1. dlroW olleH
2. Hello Worl
3. d
4. Error

Answer: A

Explanation: [::] depicts extended slicing in Python and [::-1] returns the reverse of the string.

3. What is the output of the following piece of code?

def test(i,j):  
 if(i==0):  
 return j  
 else:  
 return test(i-1,i+j)  
print(test(4,7))

1. 13
2. 7
3. Infinite loop
4. 17

Answer: D

Explanation: The test(i-1,i+j) part of the function keeps calling the function until the base condition of the function is satisfied.

4. What will be displayed by the following code?

|  |
| --- |
| def f(value, values):  v = 1  values[0] = 44  t = 3  v = [1, 2, 3]  f(t, v)  print(t, v[0]) |

1. 1 1
2. 1 44
3. 3 1
4. 3 44

Answer: D

Explanation: The value of t=3 is passed in funcion f(value,values) , v [list] is passed as values in the same function. The v is stored in values and values[0]=44 , changes the value at index[‘0’] in the list hence v=[44,2,3].

5. What is the output of the following piece of code?

counter = {}

def addToCounter(country):

if country in counter:

counter[country] += 1

else:

counter[country] = 1

addToCounter('China')

addToCounter('Japan')

addToCounter('china')

print len(counter)

Answer: 3

<https://docs.google.com/forms/d/1eJ38dId-XzTzUFyTU19pZbyEUvSyXIqUIKCTpYuIli0/edit>

Day 3

1. What Will Be The Output Of The Following Code Snippet?

with open("hello.txt", "w") as f:  
 f.write("Hello World how are you today")  
   
with open('hello.txt', 'r') as f:  
 data = f.readlines()  
 for line in data:  
 words = line.split()  
 print (words)  
 f.close()

1. Runtime Error
2. Hello World how are you today
3. [‘Hello’, ‘World’, ‘how’, ‘are’, ‘you’, ‘today’]
4. Hello

Answer: C

2. Which of the following is NOT a valid JSON object?

1. { name: "Smiley",  
    age: 20,  
    phone: "888-123-4567",  
    email: "smiley@xyz.com",  
    happy: true }
2. { "name": "Smiley",  
    "age": 20,  
    "phone": "888-123-4567",  
    "email": "smiley@xyz.com",  
    "happy": "true" }
3. { "name": "Smiley",  
    "age": 20,  
    "phone": null,  
    "email": "null",  
    "happy": true }
4. { "name": "Smiley",  
    "age": 20,  
    "phone": "888-123-4567",  
    "email": "smiley@xyz.com",  
    "happy": true }

Answer: A

3. What is the output?

f = None

for i in range (5):

with open("data.txt", "w") as f:

if i > 2:

break

print(f.closed)

1. True
2. False
3. None
4. Error

Answer: A

Explanation: The WITH statement when used with open file guarantees that the file object is closed when the with block exits.

4. What is the difference between r+ and w+ modes?

1. no difference
2. in r+ the pointer is initially placed at the beginning of the file and the pointer is at the end for w+
3. in w+ the pointer is initially placed at the beginning of the file and the pointer is at the end for r+
4. depends on the operating system

Answer: B

<https://docs.google.com/forms/d/1AZ7jioY6NdYXXDCNiR3Q1GFp3AKmK5SLkdK0XSIM9ZQ/edit>