

Multiple Choice

(A) 1. Which of the following storage unit is closest to the size of a text file with 1000 letters?

- A) 1 KB
- B) 1 MB
- C) 1 GB
- D) 1 TB

(B) 2. Which of the following data usually cannot be stored as exact value in Python?

- A) String
- B) Floating-point numbers
- C) Integer
- D) Boolean

(D) 3. Which of the following symbol denotes comment in Python?

- A) %
- B) //
- C) \$
- D) #

(B) 4. The program will get a value x from the user from the following code.

```
x = input("Please enter a number")
```

What is a possible value of x?

- A) 5
- B) "5"
- C) 5.5
- D) 0

(C) 5. What is the value of the expression 5 + 4 // 6?

- A) 1
- B) 3
- C) 5
- D) 9

(D) 6. What is the value of the expression 5 + 4 % 6?

- A) 1
- B) 3
- C) 5
- D) 9

(C) 7. Which of the following word cannot be used as a variable name?

- A) x5
- B) x5y
- C) 5xy
- D) _x

(A) 8. What is the output of the following code?

```
x = 25
if x > 0:
    print(">0")
elif x > 10:
    print(">10")
else:
    print("<0")
```

- A)>0
- B)>10
- C)>0
>10
- D)<0

(D) 9. What is the output of the following code?

```
x = 9
if x > 0:
    print(">0")
if x > 10:
    print(">10")
else:
    print("<0")
```

- A)>0
- B)<0
- C)>0
>10
- D)>0
<0

(D) 10. What is the output of the following code?

```
print("\\\\"Hello\\"/\\")
```

- A) \\\\"Hello\\"/\\"
- B) \\"Hello"/"
- C) ""Hello"/"
- D) \\"Hello"/"

(**B**) 11. What is the output of the following code?

```
if 5!=5 and 5/0==1:
    print("A")
else:
    print("B")
```

- A) A
- B) B
- C) A
B
- D) Error

(**A**) 12. What is the output of the following code?

```
if 3==3 or 5/0==1:
    print("A")
else:
    print("B")
```

- A) A
- B) B
- C) A
B
- D) Error

13. Write the output of y value after each of the print command.

```
y = 4
print('y =', y)          y = 4

y = y + 3
print('y =', y)          y = 7

y **= 2
print('y =', y)          y = 49

y %= 30
print('y =', y)          y = 19

y ** 4
print('y =', y)          y = 19

y //= 3
print('y =', y)          y = 6

y /= 2
print('y =', y)          y = 3.0
```

14. Write down the output of the following code:

```
x = 8
while x < 20:
    x += 3;
    print(x, end = ",")
```

11,14,17,20,

15. Write down the output of the following code:

```
x = 1
while x % 7 != 0:
    x += 4;
    print("Hi", end = ",")
```

Hi,Hi,Hi,Hi,Hi,

16. Write a segment of Python code to print all even numbers from 10 (inclusive) to 99(inclusive).

Solution 1: <pre>num = 10 while num <=99: print(num) num += 2</pre>	Solution 2: <pre>for num in range(10,100,2): print(num)</pre>
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17. Write a segment of Python code to do the following tasks:

<div>1. Ask the user to enter the number of customers (assume that the number will always be positive integer)</div> <div>2. Enter the number of taxis needed to transport that many customers.</div> <div>(Note: each taxi can transport a maximum of 4 people. Use the table below for reference)</div> <table><tr><th># Customers</th><th># Taxis</th></tr><tr><td>1</td><td>1</td></tr><tr><td>2</td><td>1</td></tr><tr><td>3</td><td>1</td></tr><tr><td>4</td><td>1</td></tr><tr><td>5</td><td>2</td></tr><tr><td>6</td><td>2</td></tr><tr><td>7</td><td>2</td></tr><tr><td>...</td><td>...</td></tr></table>	# Customers	# Taxis	1	1	2	1	3	1	4	1	5	2	6	2	7	2	<div>Sample program run #1: How many Customers? 8 You will need 2 taxis.</div> <div>Sample program run #2: How many Customers? 9 You will need 3 taxis.</div> <div>Sample program run #3: How many Customers? 34 You will need 9 taxis.</div>
# Customers	# Taxis																		
1	1																		
2	1																		
3	1																		
4	1																		
5	2																		
6	2																		
7	2																		
...	...																		

```
n = int(input("How many customers? "))

if(n % 4 ==0):
    print("You will need " + str(n // 4) + "taxis.")
else:
    print("You will need " + str(n // 4 + 1) + "taxis.")
```