



Developer Student Clubs

Al-Azhar University

DSCOn Track

- ✓ 1. try to type following equation and Give it a name called " Equation " 2/2
After Typing this pass a value 10 for X and Show the Result of this "
Equation " *

$$\frac{X^3 + 2X - 0.5x^{-3}}{X^2 + 2 * 10^{-5}}$$

☒ 10.1999



☐ 15

☐ 8

-
- ✓ 2. Write a function that accepts a string and calculates the length of 2/2
string . pass this string : 'Dsc machine learning on Track' *

☐ 30

☐ 25

☐ error

☒ 29



✓ 3. What is the output of the following program? *

2/2

```
names = ['ali', 'mohamed', 'mahmoud', 'ahmed']  
print(names[-2])
```

☐ mohamed

☒ mahmoud



☐ ahmed

☐ error

✓ 4. What is the output of the following program? *

2/2

```
print(3**4)
```

☐ 8

☒ 81



☐ 16

☐ error

✓ 5. Get the characters (llo). *

2/2

```
txt = "Hello World"
```

```
print(txt[2:])
```

☐ 1

```
print(txt[2:4])
```

☐ 2

```
print(txt[2:5])
```

☒ 3



```
print(txt[:5])
```

☐ 4

✓ 6. What will be the output of the following program ? *

2/2

```
car = {"brand": "Ford", "model": "Mustang", "year": 1964}  
print(car.pop("model"))
```

☐ Ford

☐ model

☒ Mustang



☐ 1964

✓ 7. To grab item0 and the characters are small. *

3/3

```
my_dict = {'key1':[1,2,3], 'key2':['Item0', 'Item1', 'Item2'] }
```

```
print(my_dict['key2'][1].lower())
```

☐ 1

```
print(my_dict['key2'][3].lower())
```

☐ 2

```
print(my_dict['key2'][-3].lower())
```

☒ 3



```
print(my_dict['key2'][2].lower())
```

☐ 4

✓ 8. What will be the output of the following program ? *

3/3

```
tuple = (1, 2, 3)
print(2 * tuple)
```

☒ (1, 2, 3, 1, 2, 3)



☐ (1, 2, 3, 4, 5, 6)

☐ (3, 6, 9)

☐ error

✓ 9. What is the output of the following program? *

3/3

```
T1 = (1)
T2 = (3, 4)
T1 += 5
print(T1)
print(T1 + T2)
```

☐ (1,2,4)

☐ (1,2,3,4)

☐ (1,2,3)

☒ error



✓ 10. What is the output of the following program? *

3/3

```
L1 = []  
L1.append([1, [2, 3], 4])  
L1.extend([7, 8, 9])  
print(L1[0][1][1]+ L1[2])
```

☐ [7,8,9]

☐ 4

☒ 11



☐ Type Error: can only concatenate list (not "int") to list

✓ 11. What is the output of the following program? *

3/3

```
L1 = [2, 1.33, 'mach', 0, 'ine', None, 'G', True]
val1, val2 = 0, ''
for x in L1:
    if(type(x) == int or type(x) == float):
        val1 += x
    elif(type(x) == str):
        val2 += x
    else:
        break
print(val1, val2)
```

- ☐ 2 mach
- ☐ 2.33
- ☐ 3.33 machineG

☒ 3.33 machine



✓ 12. What is the output of the following program? *

3/3

```
d=[]  
for i in [1, 2, 3, 4][::-1]:  
    d.append(i)  
print (d)
```

☐ [1,3]

☒ [4, 3, 2, 1]



☐ [1,2,3]

☐ error

✓ 13. To grab 'hello' in the following dictionary *

5/5

```
d = {'k1':[1,2,{'k2':['this is tricky',{'tough':[1,2,['hello']]}]}]}
```

```
print(d['k1'][2]['k2'][1])
```

☐ 1

```
print(d['k1'][2]['k2'][1]['tough'])
```

☐ 2

```
print(d['k1'][2]['k2'][1]['tough'][2][0])
```

☒ 3



```
print(d['k1'][2]['k2'][1]['tough'][2])
```

☐ 4

✓ 14. What is the output of the following program? *

5/5

```
T = (1, 2, 3, 4, 5, 6, 7, 8)
print(T[T[T[6]-3]-6])
```

☐ 6

☐ error

☒ 8



☐ 3