

1. Find outputs (Homework)

```
a = (25 , 10.8 , 'Hyd' , True , 3+4j , None , 'Hyd' , 25)
```

```
print(a) #(25 , 10.8 , 'Hyd' , True , 3+4j , None , 'Hyd' , 25)
```

```
print(*a) #25 10.8 'Hyd' True 3+4j None 'Hyd' 25
```

```
print(type(a)) #class 'tuple'
```

```
print(len(a)) #8
```

```
print(a[2 : 5]) #('Hyd', True, 3+4j)
```

```
print(*a[2 : 5]) #'Hyd' True 3+4j
```

```
a[2] = 'Sec' #Error #Reason elements in the tuple can't be modified as tuple is immutable
```

```
a . append('Sec') #Error #Reason elements in the tuple can't be modified as tuple is immutable
```

```
a . remove('Hyd') #Error #Reason elements in the tuple can't be modified as tuple is immutable
```

```
b = 10 , 20 , 30
```

```
print(b) #(10, 20, 30)
```

```
print(b * 2) #(10, 20, 30, 10, 20, 30)
```

```
c = 40 , 50 , 60,
```

```
print(c) #(40, 50, 60)
```

```
print(type(c)) #class 'tuple'
```

2. Find outputs (Homework)

```
a = (25)
```

```
b = 25,
```

```
c = 25
```

```
d = (25,)
```

```
print(type(a)) #class 'int'  
print(type(b)) #class 'tuple'  
print(type(c)) #class 'int'  
print(type(d)) #class 'tuple'  
print(a * 4) #100  
print(b * 4) #(25, 25, 25, 25)  
print(c * 4) #100  
print(d * 4) #(25, 25, 25, 25)
```

3. tuple() function demo program (Homework)

```
a = tuple('Hyd')  
print(a) #('H', 'y', 'd')  
print(type(a)) #class 'tuple'  
print(len(a)) #3  
b = [10 , 20 , 15 , 18]  
print(tuple(b)) #(10, 20, 15, 18)  
print(tuple(range(5))) #(0, 1, 2, 3, 4)  
print(tuple(25)) "Error - Reason a tuple() argument can't be a non-sequence i.e. it can't have integer as an argument"
```

4. Find outputs (Homework)

```
a = ()  
print(type(a)) #classs 'tuple'  
print(a) #()  
print(len(a)) #0
```

```
b = tuple()
```

```
print(b) #()
```

```
print(len(b)) #0
```

5. Tricky program

Find outputs (Homework)

```
a = (10 , 20 , 30)
```

```
print(a) # (10, 20, 30)
```

```
print(id(a)) #Some random address assigned by the IDE or PVM
```

```
a = a * 2 # Valid / Invalid – Valid
```

```
print(a) i.e. (10, 20, 30, 10, 20, 30)
```

```
print(id(a)) #Some random address assigned by the IDE or PVM
```