

Day 6

```
a="helloworld"
```

```
index_position=0
```

```
for i in a:
```

```
    print(f"at index position {index_position} the element is {i}")
```

```
    index_position+=1
```

o/p

at index position 0 the element is h

at index position 1 the element is e

at index position 2 the element is l

at index position 3 the element is l

at index position 4 the element is o

at index position 5 the element is w

at index position 6 the element is o

at index position 7 the element is r

at index position 8 the element is l

at index position 9 the element is d

```
a="helloworld"
```

```
for i in enumerate(a):
```

```
    print(i)
```

o/p

(0, 'h')

(1, 'e')

(2, 'l')

(3, 'l')

(4, 'o')

(5, 'w')

(6, 'o')

(7, 'r')

(8, 'l')

(9, 'd')

a=[1,2,3,4,5,6,7,8,9,10]

b=[]

for i in a:

b.append(i3)**

b

[1, 8, 27, 64, 125, 216, 343, 512, 729, 1000]

b=[i3 for i in a]**

b

[1, 8, 27, 64, 125, 216, 343, 512, 729, 1000]

a=[1,2,3,4,5,6,7,8,9,10]

b=[]

for i in a:

if i%2==0:

b.append(i3)**

b=[i3 for i in a if i%2==0]**

b

[8, 64, 216, 512, 1000]

```
a=[1,2,3,4,5]
```

```
b=[1,2,3,4,5]
```

```
c=[i*j for i in a for j in b]
```

```
c
```

```
[1, 2, 3, 4, 5, 2, 4, 6, 8, 10, 3, 6, 9, 12, 15, 4, 8, 12, 16, 20, 5, 10, 15, 20, 25]
```

Function

```
def test():
```

```
    print("we are learning python")
```

```
test()
```

```
we are learning python
```

```
def test(name):
```

```
    print("hello "+name)
```

```
test()
```

Traceback (most recent call last):

```
File "<pyshell#17>", line 1, in <module>
```

```
    test()
```

TypeError: test() missing 1 required positional argument: 'name'

```
test("ankit")
```

```
helloankit
```

```
test("shruti")
```

```
hello shruti
```

Default Argument

```
def test(name='nielit'):
```

```
print("hello "+name)
```

```
test("ankit")
```

```
hello ankit
```

```
test()
```

```
hello nielit
```

```
def test(a,b):
```

```
    print(a+b)
```

```
test(10,20)
```

```
30
```

```
c=test(10,20)
```

```
30
```

```
c
```

```
type(c)
```

```
<class 'NoneType'>
```

```
def test(a,b):
```

```
    return a+b
```

```
test(10,20)
```

```
30
```

```
c=test(10,20)
```

```
c
```

```
30
```

```
def test(a):
```

for i in a:

if i%2==0:

return 'EVEN'

else:

pass

return 'ODD'

test([2,3,4])

'EVEN'

test([1,2,3])

'ODD'

test([1,2,3])

'EVEN'

test([1,3,5])

test([1,3,5])

'ODD'