

Input statement

```
In [1]: inp=input()
```

Hi! how are you?

```
In [2]: print(inp)
```

Hi! how are you?

```
In [3]: i=input("Enter your Name:\n")
print(i)
```

Enter your Name:

XYZ

XYZ

```
In [2]: x,y= input("Enter two numbers").split(',')
print(x,y)
```

Enter two numbers2,5

2 5

```
In [ ]:
```

range Datatype

```
In [8]: r = range(10)
print(r)
```

range(0, 10)

```
In [9]: r= range(30,40,2)
print(r)
```

range(30, 40, 2)

Control Structures

the if statement

```
In [3]: x=1
        if x==1:
            print("its one")

File "<ipython-input-3-0177ba216068>", line 3
    print("its one")
    ^
IndentationError: expected an indented block
```

if-else

```
In [5]: x= int (input("enter a number : "))
        if x%2== 0:
            print(x,"is even")
        else:
            print(x, " is odd")

enter a number : 5
5 is odd
```

while

```
In [6]: x=1
        while x<=5:
            print(x)
            x=x+1
        print("end")

1
2
3
4
5
end
```

***For Loops**

```
In [7]: for i in range(5):
        print(i)

0
1
2
3
4
```

```
In [1]: fruits = ["apple", "banana", "cherry"]
        for x in fruits:
            print(x)
```

```
apple
banana
cherry
```

```
In [11]: lst=[10,50,4,5,9,8,3]
         for i in lst:
             print(i)
```

```
10
50
4
5
9
8
3
```

Creating list using for loop

```
In [4]: pow2 = [2 ** x for x in range(10)]
        print(pow2)
```

```
[1, 2, 4, 8, 16, 32, 64, 128, 256, 512]
```

```
In [ ]: pow2 = [2 ** x for x in range(10) if x>5]
        print(pow2)
```

Exercise

3. Generate the nested list of 3 students(name,roll no) and display information using for loop

```
In [16]: n= int(input("Enter n: "))
         s_list=[]
         for i in range(n):
             s=input("Enter name,rollno: ").split(',')
             s_list.append(s)
         print(s_list)
         for students in s_list:
             for field in students:
                 print(field,end=" ")
             print()
```

```
Enter n: 3
Enter name,rollno: a,1
Enter name,rollno: b,2
Enter name,rollno: c,3
[['a', '1'], ['b', '2'], ['c', '3']]
a 1 b 2 c 3
```

