

IF STATEMENT

```
In [6]: # PRINTING EVEN AND ODD NUMBERS
```

```
In [8]: # IF THE REMINDER IS ZERO IT PRINTS ' EVEN NUMBER '  
# IF THE REMINDER IS NOT ZERO IT PRINTS ' ODD NUMBER '
```

```
In [16]: # USING SINGLE IF CONDITION
```

```
In [10]: x = 5  
r = x % 2  
  
if r == 0:  
    print("Even Number")  
  
# FOR THIS CODE AS THE REMINDER IS 1, THERE IS NO OTHER STATEMENT TO EXECUTE HEN
```

```
In [24]: x = 6  
r = x % 2  
  
if r == 0:  
    print("Even Number")  
  
# FOR THIS CODE AS THE REMINDER IS 0, IT PRINTS EVEN NUMBER
```

Even Number

```
In [18]: # USING MULTIPLE IF CONDITION
```

```
In [22]: x = 5  
r = x % 2  
  
if r == 0:  
    print("Even Number")  
  
if r == 1:  
    print("Odd Number")  
  
# FOR THIS CODE AS THE REMINDER IS 1, THE 1st IF CONDITION IS NOT SATISFIED, IT  
# CONDITION IS SATISFIED, HENCE IT PRINTS ODD NUMBER
```

Odd Number

```
In [32]: x = 6  
r = x % 2  
  
if r == 0:  
    print("Even Number")  
  
if r == 1:  
    print("Odd Number")  
  
# FOR THIS CODE AS THE REMINDER IS 0, THE 1st IF CONDITION IS SATISFIED, IT EXIT  
# CONDITION IS NOT SATISFIED, HENCE IT PRINTS EVEN NUMBER
```

Even Number

IF ELSE STATEMENT

```
In [39]: x = 5
r = x % 2

if r == 0:
    print("Even Number")

else:
    print("Odd Number")

# FOR THIS CODE AS THE REMINDER IS 1, THE 1st IF CONDITION IS NOT SATISFIED, IT
# CONDITION IS SATISFIED, HENCE IT PRINTS ODD NUMBER
```

Odd Number

```
In [45]: x = 6
r = x % 2

if r == 0:
    print("Even Number")

else:
    print("Odd Number")

# FOR THIS CODE AS THE REMINDER IS 0, THE 1st IF CONDITION IS SATISFIED, IT EXIT
# HENCE IT PRINTS EVEN NUMBER
```

Even Number

IF ELIF STATEMENT

```
In [57]: x = 5
r = x % 2

if r == 0:
    print("Even Number")

elif r == 1:
    print("Odd Number")

# FOR THIS CODE AS THE REMINDER IS 1, THE 1st IF CONDITION IS NOT SATISFIED, IT
# CONDITION IS SATISFIED, HENCE IT PRINTS ODD NUMBER
```

Odd Number

```
In [59]: x = 6
r = x % 2

if r == 0:
    print("Even Number")

elif r == 1:
    print("Odd Number")
```

```
# FOR THIS CODE AS THE REMINDER IS 0, THE 1st IF CONDITION IS SATISFIED, IT EXIT  
# HENCE IT PRINTS EVEN NUMBER
```

Even Number

IF ELIF ELSE STATEMENT

```
In [71]: a = 11  
b = 10  
  
if a > b:  
    print("A is Greater than B")  
  
elif a == b:  
    print(" A is Equal To B")  
  
else:  
    print("A is Lesser than B")  
  
# FOR THIS AS A > B, THE IF CONDITION IS SATISFIED, IT DEOS NOT CHECK THE ELIF C  
# IT PRINTS A IS GRATER THAN B
```

A is Greater than B

```
In [65]: a = 5  
b = 5  
  
if a > b:  
    print("A is Greater than B")  
  
elif a == b:  
    print(" A is Equal To B")  
  
else:  
    print("A is Lesser than B")  
  
# FOR THIS AS BOTH THE NUMBERS ARE EQUAL, THE IF CONDITION IS NOT SATISFIED, THE  
# IT PRINTS A IS EQUAL TO B
```

A is Equal To B

```
In [69]: a = 5  
b = 10  
  
if a > b:  
    print("A is Greater than B")  
  
elif a == b:  
    print(" A is Equal To B")  
  
else:  
    print("A is Lesser than B")  
  
# FOR THIS AS A < B, THE IF CONDITION IS NOT SATISFIED, THE ELIF CONDITION IS NO  
# IT PRINTS A IS LESSER THAN B
```

A is Lesser than B

NESTED IF STATEMENT

```
In [85]: c = 60

if c > 56:
    print("C is Gretaer")
    if c > 20:
        print("C is Greater")

else:
    print("C is less")

# FOR THIS AS C > 56 & 20, THE IF CONDITION IS SATISFIED, THE NESTED IF CONDITIO
# IT PRINTS C is Gretaer
# IT PRINTS C is Gretaer
```

C is Gretaer
C is Greater

```
In [89]: c = 7

if c > 56:
    print("C is Gretaer")
    if c > 20:
        print("C is Greater")

else:
    print("C is less")

# FOR THIS AS C < 56 & 20, THE IF CONDITION IS NOT SATISFIED, THE NESTED IF COND
# IT PRINTS C is Less
```

C is less

FOR LOOP

```
In [100... r = 'hello World!'

for i in range(5):
    print(r)
```

hello World!
hello World!
hello World!
hello World!
hello World!