Conditional statements_may 8th 25

May 9, 2025

[1]:
```
if True:                ## indentiation is always 4 spaces- means before print␣
 ↪4 spaces
    print('Data science')
```

```
Data science
```

[7]:
```
if True:
    print('Data science')
```

```
Data science
```

[9]:
```
if True:
     print('Data science')
```

```
Data science
```

[23]:
```
if False:
    print('Data science')
print('Bye for now')

# The condition if False: is never true, so the code inside the if block will␣
 ↪not run.

# Since the print() statement is inside that block, it will be skipped.
# and only below print is take if no space is used before it.
```

```
Bye for now
```

[27]:
```
if True:
    print('Data science')
else:
    print('bye for now')

#This is an if...else statement.

#if True: is always true, so the code inside that block will run.

#The else: block is only executed if the if condition is false - but here, it's␣
 ↪not.
```

Data science

[31]:
```
if False:
    print('Data Science')
else:
    print('bye for now')

# if False: → This condition is not true, so the code inside this block is␣
 ↪skipped.

# else: → Since the if block didn't run, Python moves to the else block.

# print('bye for now') → This line will run and print:
```

bye for now

[39]:
```
x = 4
r = x % 2

if r == 0:
    print('Even number')

# use == only
# = is assignment: it sets a value.
# Example: x = 10 assigns the value 10 to x.

## == is comparison: it checks equality.
## Example: x == 10 checks if x is equal to 10.
```

Even number

[43]:
```
x = 5
r = x % 2

if r == 0:
    print('Even number')

# do not print anything as r not equal to zero
```

[45]:
```
x = 5
r = x % 2

if r == 0:
    print('Even number')

if r == 1:
    print('odd number')
```

odd number

[47]:
```
x = 4
r = x % 2

if r == 0:
    print('Even number')
else:
    print('odd number')
```

```
Even number
```

[49]:
```
x = 3
r = x % 2

if r == 0:
    print(' Even number')
    if x>5:
        print('greater number')
else:
    print('Odd Number')
```

```
Odd Number
```

[51]:
```
x = 4
r = x % 2

if r == 0:
    print(' Even number')
    if x>5:
        print('greater number')

    else:
        print('lesser number ')
else:
    print('Odd Number')
```

```
 Even number
lesser number
```

[53]:
```
x = 6
r = x % 2
if r == 0:
    print('Even number')
    if x>5:
        print('greater number')
    else:
        print('not greater')
else:
    print('Odd Number')
```

```
Even number
greater number
```

[55]:
```
x = 2

if x == 1:
    print('one')
if x == 2:
    print('Two')
if x == 3:
    print('Three')
if x == 4:
    print('four')
```

```
Two
```

[59]:
```
x = 5

if x == 1:
    print('one')

elif x == 2:
    print('Two')
elif x == 3:
    print('Three')
elif x == 4:
    print('four')

else:
    print('number not found')
```

```
number not found
```

[ ]:
```

```