Control Flow Statements If, elif, else

```
In [1]:  age = 6
         if age >= 18:
             print("You are eligible to vote.")
         elif age <= 5:
             print("You are still a toddler.")
         elif age >=6 and age <= 10:
             print("You should enrol in a school with Form-B.")
         else:
             print("Abhi chotay ho ap.")
```

```
You should enrol in a school with Form-B.
```

Examples

```
In [2]:  temp = 32

         if temp >= 30:
             print("It's a hot day. Thanda pani pee lo")
         elif temp <= 10:
             print("It's a cold day. Garam chai pee lo.")
         else:
             print("It's neither hot nor cold. Enjoy the weather.")
```

```
It's a hot day. Thanda pani pee lo
```

```
In [3]:  occassion = "Eid"

         if occassion == "Eid-ul_Fitr":
             print("Let's prepare some Sheer Khurma.")
         elif occassion == "Eid-ul_Adha":
             print("Let's prepare some Kebab.")
         else:
             print("It's a normal day. let's have Aalo Gobhi.")
```

```
It's a normal day. let's have Aalo Gobhi.
```

Nested If statements

```
In [4]:  age = 18
         license = True

         if age >= 18:
             if license:
                 print("You are eligible to drive.")
             else:
                 print("You are not eligible to drive, you need a license.")
         else:
             print("You are not eligible to drive.")
```

```
You are eligible to drive.
```

Loops

1. for loop

```
In [5]:  print("Waseem")
         print("Bilal")
         print("Qasim")
         print("Shahid")
         print("Tariq")
         print("Umer")
```

```
Waseem
Bilal
Qasim
Shahid
Tariq
Umer
```

```
In [6]:  list = ["Waseem", "Bilal", "Qasim", "Shahid", "Tariq", "Umer"]

         for item in list:
             print(item)
```

```
Waseem
Bilal
Qasim
Shahid
Tariq
Umer
```

While loop

```
In [7]:  cups_of_chai = 0

         while cups_of_chai < 2:
             print("I want more chai.")
             cups_of_chai += 1

         print("I have had enough chai.")
```

```
I want more chai.
I want more chai.
I have had enough chai.
```

Break and Continue

```
In [8]:  cups_of_chai = 0

         while cups_of_chai < 200000:
             cups_of_chai += 1
             print("I want more chai.")
             if cups_of_chai == 3:
                 print("Too much chai, stopping now.")
                 break
             print("I have had", cups_of_chai, "cups of chai.")
```

```
I want more chai.
I have had 1 cups of chai.
I want more chai.
I have had 2 cups of chai.
I want more chai.
Too much chai, stopping now.
```

continue

In [9]:
```python
cups_of_chai = 0

while cups_of_chai < 5:
    cups_of_chai += 1
    print("I want more chai.")
    if cups_of_chai == 3:
        print("Too much chai, stopping now.")
        continue
    print("I have had", cups_of_chai, "cups of chai.")
```

```
I want more chai.
I have had 1 cups of chai.
I want more chai.
I have had 2 cups of chai.
I want more chai.
Too much chai, stopping now.
I want more chai.
I have had 4 cups of chai.
I want more chai.
I have had 5 cups of chai.
```

Range function in loops

In [10]:
```python
for cup in range(1, 10, 2):
    print("Chai is ready, Chai cup", cup, "Served.")
```

```
Chai is ready, Chai cup 1 Served.
Chai is ready, Chai cup 3 Served.
Chai is ready, Chai cup 5 Served.
Chai is ready, Chai cup 7 Served.
Chai is ready, Chai cup 9 Served.
```

In [11]:
```python
count = 0

while True:
    count += 1
    print("This loop will run forever.")
    if count == 2:
        break
```

```
This loop will run forever.
This loop will run forever.
```

Pass statement

In [12]:
```python
cups_of_chai = 0
```

```python
while cups_of_chai < 5:
    cups_of_chai += 1
    print("I want more chai.")
    if cups_of_chai == 3:
        print("Too much chai, stopping now.")
        pass
    print("I have had", cups_of_chai, "cups of chai.")
```

```
I want more chai.
I have had 1 cups of chai.
I want more chai.
I have had 2 cups of chai.
I want more chai.
Too much chai, stopping now.
I have had 3 cups of chai.
I want more chai.
I have had 4 cups of chai.
I want more chai.
I have had 5 cups of chai.
```

try, except and finally

In [13]:
```python
print("Hello")
print(1/0)
```

```
Hello
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In[13], line 2
      1 print("Hello")
----> 2 print(1/0)

ZeroDivisionError: division by zero
```

In [14]:
```python
# example of try, except and finally
try:
    print("Hello")
    print(5/5)
except ZeroDivisionError:
    print("There is an error, you are trying to divide by zero which is impossible.
finally:
    print("This will execute no matter what.")
```

```
Hello
1.0
This will execute no matter what.
```