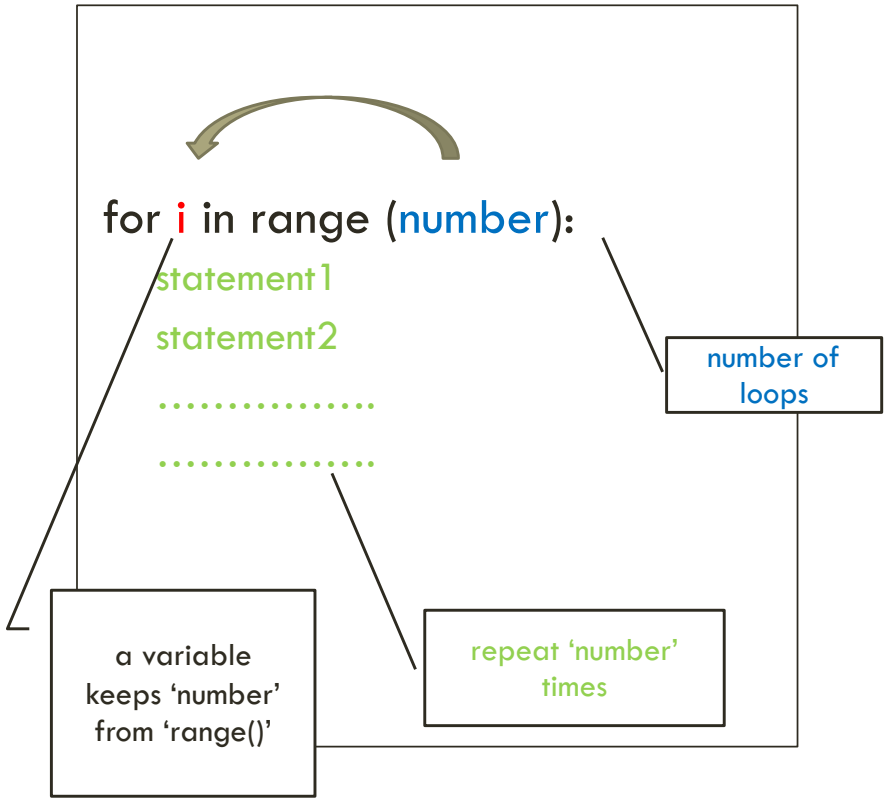
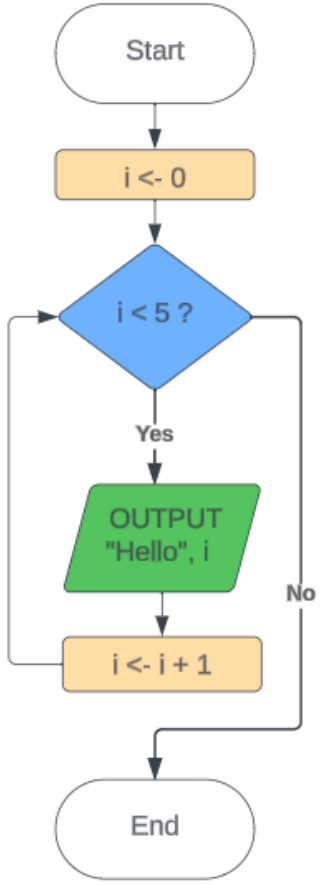
FOR LOOP STATEMENT




```
>>> for i in range (5):
        print('Hello')

Hello
Hello
Hello
Hello
Hello
```

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


0
1
2
3
4
```

```
>>> number = [10,5,7,9,2]
>>> for i in range (5):
        print(number[i])


10
5
7
9
2
```



QUESTION

- Ask user to input a number
- Output the multiplication table of that number
- The output should be like this

```
Enter a number: 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
5 x 11 = 55
5 x 12 = 60
```

FOR LOOP STATEMENT

- Create a list of random numbers

```
1  import random  # import library random
2  number = []  # initialise a blank array
3  for i in range(5):  # loop 5 times
4      temp = random.randint(1,10)  # random a number between 1-10 and store in temp
5      number.append(temp)  # put the number from variable temp into array number
6  print(number)
```

FINDING THE HIGHEST NUMBER

```
56  number = [5,1,9,7,8,3]
57  highest = 0 #assign the possible lowest value in highest variable
58  for i in range (len(number)): #repeat six times
59      if number[i] > highest: #check if the extracted data is greater than value in highest
60          highest = number[i] #if yes, update the highest value
61  print('the highest value is',highest)
```

What about lowest value?

FINDING THE TOTAL NUMBER

```
63  number = [5,1,9,7,8,3]
64  total = 0 #intitialise value
65  for i in range (len(number)): #repeat six times
66      total = total + number[i] #totaling statement
67  print('The total value : ', total)
```

What about average?

LINEAR SEARCH

```
number = [5, 1, 12, -5, 16]

target = int(input("Enter a target number: "))
for i in range(len(number)):
    if target == number[i]:
        print("Found")
    else:
        print("Not found")
```

```
number = [5, 1, 12, -5, 16]
found = False

target = int(input("Enter a target number: "))
for i in range(len(number)):
    if target == number[i]:
        found = True

if found == True:
    print(target, "is found")
else:
    print(target, "not found")
```