*# program-1 while loop*i = 1  
while i < 6:  
 print(i)  
 if i == 3:  
 break  
 i+= 1  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*# program-2 while loop*j = 1  
while j < 8:  
 print(j)  
 print("Welcome to python world")  
 if j == 7 :  
 break  
 j+=1  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program -3 while loop*k = 0  
while k < 5:  
 k += 1  
 if k == 3:  
 continue  
 print(k)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program -4*c = 1  
while c < 5:  
 print(c)  
 c += 1  
else:  
 print("c is no longer than 6")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program -5 for loop*fruits = ["grapes","banana","Mango","Apple"]  
for x in fruits:  
 print("Given Element: ",x)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program-6 for loop(strings)*for x in "banana":  
 print("Result: ",x)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program-7*city = ["chennai","Banglore","mumbai","Kolkatta","goa"]  
for y in city:  
 print("cities list: ",y)  
 if y == "Kolkatta":  
 break  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program-8*city = ["chennai","Banglore","mumbai","Kolkatta","goa"]  
for y in city:  
 if y == "Kolkatta":  
 break  
 print("Result after break statement: ",y)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program\_9 for & continue statement*city = ["chennai","Banglore","mumbai","Kolkatta","goa"]  
for c in city:  
 if c == "mumbai":  
 continue  
 print ("list after if checking: ",c)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program-10 range*for x in range(6):  
 print(x)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program\_11*for x in range(2,6):  
 print(x)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program - 12*for x in range(1,6,1):  
 print(x)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program - 13*for x in range(6):  
 print(x)  
else:  
 print("finally finished")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program-14*for x in range(6):  
 if x == 3: break  
 print(x)  
else:  
 print("Finally finished")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program-15*x = [1,3,5,7,9]  
y = [2,4,6,8]  
for h in x:  
 for k in y:  
 print(h,k)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program - 15- function*def my\_function():  
 print("Hello from a function")  
  
my\_function()  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program - 16 - function*def family(name):  
 print(name+ "jones")  
  
family("amenda ")  
family("emili ")  
family("margrette ")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program- 17*def func1(sname,hname):  
 print(sname+" "+hname)  
  
func1("Geetha","Latha")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program -18*def joy(\*name):  
 print("The youngest child is "+name[2])  
  
joy("Latha","Geetha","uma","Rama","Ruba")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program -19*def my\_family(child1,child2,child3):  
 print("The youngest child is: "+child2)  
  
my\_family("Ruban","Altaf","Ram")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program - 20*def my\_function(\*\*kid ):  
 print("His last name is "+kid["lname"])  
  
my\_function(fname="Guru",lname="muthu")  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program - 21 -Assignment*def fact(x):  
 print("The factor of ", x ,"are: ")  
 for i in range(1,x+1):  
 if x % i == 0:

print(i)  
  
j=420  
fact(j)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program -22 -Assignment to print 10 even numbers*print("Natural numbers are ")  
for i in range(0,11):  
 print(i)  
  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program -23 Assignment*for i in range(1,24):  
 if i % 2 == 0:  
 print("Even numbers are ",i)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program-24 Assignment*for i in range(1,24):  
 if i % 2 != 0:  
 print("Odd numbers are ",i)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program -25 Assignment*for i in range(1,11):  
 print("Whole numbers are ",i)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program -26 Assignment -loop statement to print the following series:  
#10, 20, 30 … … 300*print("Multipels of 10 numbers ",x)  
for i in range(10,301):  
 if i % 10 == 0:  
 print (i)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#program -27 Assignment - print first 10 integers and their squares*for i in range(1,11):  
 print (i, " ",i \* i)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")  
  
*#Program - 28 Multipels of 7*for i in reversed(range (7,106)):  
 if i % 7 == 0:  
 print ("multipels of 7",i)  
print("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~")

Output:

1

2

3

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1

Welcome to python world

2

Welcome to python world

3

Welcome to python world

4

Welcome to python world

5

Welcome to python world

6

Welcome to python world

7

Welcome to python world

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1

2

4

5

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1

2

3

4

c is no longer than 6

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Given Element: grapes

Given Element: banana

Given Element: Mango

Given Element: Apple

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Result: b

Result: a

Result: n

Result: a

Result: n

Result: a

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

cities list: chennai

cities list: Banglore

cities list: mumbai

cities list: Kolkatta

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Result after break statement: chennai

Result after break statement: Banglore

Result after break statement: mumbai

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

list after if checking: chennai

list after if checking: Banglore

list after if checking: Kolkatta

list after if checking: goa

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

0

1

2

3

4

5

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

2

3

4

5

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1

2

3

4

5

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

0

1

2

3

4

5

finally finished

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

0

1

2

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1 2

1 4

1 6

1 8

3 2

3 4

3 6

3 8

5 2

5 4

5 6

5 8

7 2

7 4

7 6

7 8

9 2

9 4

9 6

9 8

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Hello from a function

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

amenda jones

emili jones

margrette jones

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Geetha Latha

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The youngest child is uma

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The youngest child is: Altaf

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

His last name is muthu

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The factor of 420 are:

1

2

3

4

5

6

7

10

12

14

15

20

21

28

30

35

42

60

70

84

105

140

210

420

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Natural numbers are

0

1

2

3

4

5

6

7

8

9

10

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Even numbers are 2

Even numbers are 4

Even numbers are 6

Even numbers are 8

Even numbers are 10

Even numbers are 12

Even numbers are 14

Even numbers are 16

Even numbers are 18

Even numbers are 20

Even numbers are 22

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Odd numbers are 1

Odd numbers are 3

Odd numbers are 5

Odd numbers are 7

Odd numbers are 9

Odd numbers are 11

Odd numbers are 13

Odd numbers are 15

Odd numbers are 17

Odd numbers are 19

Odd numbers are 21

Odd numbers are 23

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Whole numbers are 1

Whole numbers are 2

Whole numbers are 3

Whole numbers are 4

Whole numbers are 5

Whole numbers are 6

Whole numbers are 7

Whole numbers are 8

Whole numbers are 9

Whole numbers are 10

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Multipels of 10 numbers [1, 3, 5, 7, 9]

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

190

200

210

220

230

240

250

260

270

280

290

300

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1 1

2 4

3 9

4 16

5 25

6 36

7 49

8 64

9 81

10 100

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

multipels of 7 105

multipels of 7 98

multipels of 7 91

multipels of 7 84

multipels of 7 77

multipels of 7 70

multipels of 7 63

multipels of 7 56

multipels of 7 49

multipels of 7 42

multipels of 7 35

multipels of 7 28

multipels of 7 21

multipels of 7 14

multipels of 7 7