

TASK -2

1.while loop

example -1

In [2]:

```
user_data = int(input('enter a number : '))
i=1
while i<user_data:
    print(i)
    i=i+1
```

enter a number : 5

1
2
3
4

example -2

In [4]:

```
number = int(input('enter number : '))
i=1
while i<number+1:
    print('JWALA')
    i=i+1
```

enter number : 8

JWALA
JWALA
JWALA
JWALA
JWALA
JWALA
JWALA
JWALA

2.for loop

example -1

In [6]:

```
value = int(input('enter value : '))
print('odd numbers : ')
for i in range(1,value+1,2):
    print(i)
```

```
enter value : 10
odd numbers :
1
3
5
7
9
```

example -2

In [1]:

```
name = input(' enter name : ')
for i in name :
    print(i)
```

```
enter name : varsha reddy
v
a
r
s
h
a

r
e
d
d
y
```

3.if else

example -1

In [2]:

```
number1 = int(input('enter 1st number : '))
number2 = int(input('enter 2nd number : '))
if number1>number2:
    print('highest number',number1)
else:
    print('highest number',number2)
```

```
enter 1st number : 5
enter 2nd number : 8
highest number 8
```

example -2

In [3]:

```
char = input('enter character : ')
if char <= 'A' and char>='Z' or char <='a' and char>='b':
    print('it is alphabet')
else:
    print('it is not an alphabet')
```

```
enter character : 7
it is not an alphabet
```

if elif else

example -1

In [4]:

```
number1=int(input('enter 1st number'))
number2=int(input('enter 2nd number'))
number3=int(input('enter 3rd number'))
if number1 > number2 and number1 > number3:
    high=number1
    if number2>number3:
        sec=number2
    else:
        last=number3
elif number2 > number1 and number2 > number3:
    high=number2
    if number1>number3:
        sec=number1
    else:
        last=number3
else:
    high=number3
    if number2>number1:
        sec=number2
    else:
        last=number1

print('ascending order',last,sec,high)
```

```
enter 1st number2
enter 2nd number3
enter 3rd number4
ascending order 2 3 4
```

example -2

In [5]:

```
char = input('enter a character : ')
if char <= 'A' and char>='Z' or char <='a' and char>='b':
    print('it is a character')
elif char >= '0' and char <='9':
    print('it is a digit')
elif char == ' ' or char == '\t' or char == '\n':
    print('it is space')
else:
    print('it is a special character')
```

```
enter a character : #
it is a special character
```

5.user defined functions without for loop,if loop

example -1

In [6]:

```
def addition(a,b):  
    print(a+b)  
number1=int(input('enter 1st number'))  
number2=int(input('enter 2nd number'))  
addition(number1,number2)
```

```
enter 1st number3  
enter 2nd number5  
8
```

example -2

In [7]:

```
def print_(char):  
    print(char)  
name=input('enter name : ')  
print_(name)
```

```
enter name : varsha  
varsha
```

6.user defined functions with for loop

example -1

In [9]:

```
def factorial(value):  
    fact=1  
    for i in range(1,value+1):  
        fact=fact*i  
    print('factorial is ',fact)  
number=int(input('enter a number : '))  
factorial(number)
```

```
enter a number : 5  
factorial is 120
```

example -2

In [1]:

```
def string(char):  
    for i in char:  
        print(i)  
name=input('enter name : ')  
string(name)
```

enter name : jaswanth

j
a
s
w
a
n
t
h

7.user defined function with for loop and if statement

example -1

In [3]:

```
def factors(value):  
    for i in range(1,value+1):  
        if value%i==0:  
            print(i)  
number=int(input('enter a number'))  
factors(number)
```

enter a number10

1
2
5
10

example -2

In [4]:

```
def prime(value):  
    sum_=0  
    for i in range(1,value+1):  
        if value%i==0:  
            sum_=sum_+1  
    if sum_==2:  
        print('it is a prime number')  
number=int(input('enter a number : '))  
prime(number)
```

enter a number : 7
it is a prime number

8.break

example -1

In [6]:

```
user_req=int(input('enter number : '))  
for i in range(2,user_req):  
    if user_req%i==0:  
        print('it is not a prime')  
        break  
else:  
    print('it is a prime')
```

enter number : 2
it is a prime

example -2

In [7]:

```
name =input('enter a name ')  
for i in name:  
    if i=='a':  
        print('a is present')  
        break  
else:  
    print('a i not present')
```

enter a name jaswant
a is present

9.continue

example -1

In [9]:

```
number=int(input('enter a number : '))
print('except multiplies of {}'.format(number))
for i in range(1,number+1):
    if number%i==0:
        continue
    print(i)
```

```
enter a number : 10
except multiplies of 10
3
4
6
7
8
9
```

example -2

In [12]:

```
data = input('enter data')
for i in data:
    if i=='a':
        continue
    print(i)
```

```
enter datagame
g
m
e
```

10.for loop with in operator

example -1

In [13]:

```
list_ =[1,2,3,4,34,5,]
for i in list_:
    print(i)
```

```
1
2
3
4
34
5
```

example -2

In [14]:

```
item = 'book'
for i in item:
    print(i)
```

b
o
o
k

11.for loop with if statement

example -1

In [15]:

```
number=int(input('enter a number'))
for i in range(1,number+1):
    for j in range(1,number+1):
        if i==j:
            print('1',end=' ')
        else:
            print('0',end=' ')
    print('\n')
```

enter a number4

1 0 0 0

0 1 0 0

0 0 1 0

0 0 0 1

example -2

In [22]:

```
fruit = 'mango123&'
for i in fruit:
    if i>= '0' and i<='9':
        print(i)
```

1
2
3

12.if with in operator

example -1

In [25]:

```
data = [1,2,3,4,5]
if 4 in data:
    print('present')
```

present

example -2

In [27]:

```
movie = 'twilight saga'
if 'w' in movie:
    print('present')
```

present

13.if with not in operator

example -1

In [29]:

```
data = [1,2,3,4,5]
if 8 not in data:
    print(' not present')
```

not present

example -2

In [30]:

```
movie = 'twilight saga'
if 'z' not in movie:
    print('not present')
```

not present

In []: