**FUNCTION,LOOP & CONDITIONAL STATEMENTS**

**LAB WORK:**

**1.PROGRAM**

def print\_info(name,age):

print("Name:",name)

print("Age:",age)

print\_info(name="mike",age=50)

**OUTPUT**

Name: mike

Age: 50

**2.PROGRAM**

def Square(x):

y=x\*x

return y

a=10

result=Square(a)

print("The Square is",result)

**OUTPUT**

The Square is 100

**3.PROGRAM**

def print\_info(name,age=35):

print("Name:",name)

print("Age:",age)

print\_info(name="mike",age=50)

print\_info(name="mike")

**OUTPUT**

Name: mike

Age: 50

Name: mike

Age: 35

**4.PROGRAM**

fruites=['apple','banana','mango']

for b in fruites:

print("Current fruites:",(b))

**OUTPUT**

Current fruites: apple

Current fruites: banana

Current fruites: mango

**5.PROGRAM**

for b in range(6):

print("number is: ",b)

**OUTPUT**

number is: 0

number is: 1

number is: 2

number is: 3

number is: 4

number is: 5

**6.PROGRAM**

a=0

while a<10:

a=a+1

print("Result: ",a)

**OUTPUT**

Result: 1

Result: 2

Result: 3

Result: 4

Result: 5

Result: 6

Result: 7

Result: 8

Result: 9

Result: 10

**7.PROGRAM**

n=0

for n in range(6):

n=n+1

if n==5:

break

print(n)

print("out of loop")

**OUTPUT**

1

2

3

4

out of loop

**8.PROGRAM**

n=0

for n in range(10):

n=n+1

if n==5:

continue

print(n)

print("out of loop")

**OUTPUT**

1

2

3

4

6

7

8

9

10

out of loop

**EXERCISE:**

**Object 01:**Write a script that user input to create the multiplication table(from 1 to 10) of that number.

**Source Code:**

def loop():

a=int(input("Enter no for table: "))

for b in range(10):

print(str(a)+"\*"+str(b+1)+"="+str(a\*(b+1)))

loop()

**Output:**

Enter no for table: 5

5\*1=5

5\*2=10

5\*3=15

5\*4=20

5\*5=25

5\*6=30

5\*7=35

5\*8=40

5\*9=45

5\*10=50

**Object 02:**Write a script that take user input & tell whether no is even or odd

**Source Code:**

def even():

a=int(input("Enter no: "))

b=a%2

if b==0:

print("even number")

else:

print("Odd number")

even()

**Output:**

Enter no: 6

even number

>>> ================================ RESTART ================================

>>>

Enter no: 9

Odd number

**Object 03:** Write a function called describe\_city() that accept the name of a city & its country. The function should print a simple sentence “Karachi is in Pakistan”. Give the parameter for the country a default value call your function for five different cities at least two of which is not default country.

**Source Code:**

def describe\_city(city,country="Pakistan"):

print(city+" is in "+country)

describe\_city("karachi")

describe\_city("Delhi","India")

describe\_city("lahore")

describe\_city("multan")

describe\_city("California","America")

**Output:**

karachi is in Pakistan

Delhi is in India

lahore is in Pakistan

multan is in Pakistan

California is in America

**Object 04:** Write a function called absolute\_num() accept one parameter num. The function should return only positive value. Also apply condition that function return positive value either number entered is negative.

**Source Code:**

def absolute\_num(num):

if num<0:

print("Negative value convert into positive: ",abs(num))

return abs(num)

if num>0:

return num

num=int(input("Enter no: "))

result=absolute\_num(num)

print("Positive value is:",result)

**Output:**

Enter no: -3

Negative value convert into positive: 3

Positive value is: 3

>>> ================================ RESTART ================================

>>>

Enter no: 4

Positive value is: 4

**Object 05:**Write a script that prints all numbers from 1 to50 except 15 & 20 (use continue).

**Source Code:**

number=1

for number in range(50):

if (number==15)|(number==20):

continue

print(number)

**Output:**

1

2

3

4

5

6

7

8

9

10

11

12

13

14

16

17

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**Object 06:**

Write a script that determine a person’s stage of life

* If person <2,print person is baby
* If person is at least 4 & less than 13,he is a kid
* If person is at least 13 but less than 20,he is a teenager
* If person is at least 20 but less than 65,he is adult
* If the person is greater 65 he is an elder

**Source Code:**

def age():

a=int(input("Enter your age: "))

if (a<2):

print("person is baby")

elif (a>=4)&(a<13):

print("he is kid")

elif (a>=13)&(a<20):

print("he is tenager")

elif (a>=20)&(a<65):

print("he is adult")

elif (a>65):

print("he is elder")

age()

**Output:**

Enter your age: 1

person is baby

>>> ================================ RESTART ================================

>>>

Enter your age: 5

he is kid

>>> ================================ RESTART ================================

>>>

Enter your age: 15

he is tenager

>>> ================================ RESTART ================================

>>>

Enter your age: 25

he is adult

>>> ================================ RESTART ================================

>>>

Enter your age: 66

he is elder

>>>