1.

num = int(input("Enter a Number : "))

lim = int(input("Enter Table Limit : "))

for x in range(lim+1):

mul = num\*x

print("\n",str(num)," \* ",str(x)," = ",str(mul))

Output :

Enter a Number : 5

Enter Table Limit : 10

5 \* 0 = 0

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

2.

lolim = int(input("Enter Lower Limit : "))

uplim = int(input("Enter Upper Limit : "))

for x in range(lolim,uplim+1):

if(x%2==0):

print(str(x)," -- Even Number!")

else:

print(str(x)," -- Odd Number!")

Output :

Enter Lower Limit : 45

Enter Upper Limit : 55

45 -- Odd Number!

46 -- Even Number!

47 -- Odd Number!

48 -- Even Number!

49 -- Odd Number!

50 -- Even Number!

51 -- Odd Number!

52 -- Even Number!

53 -- Odd Number!

54 -- Even Number!

55 -- Odd Number!

3.

num = int(input("Enter a number: "))

if num > 1:

for i in range(2,num):

if (num % i) == 0:

print(num,"is not a prime number")

print(i,"times",num//i,"is",num)

break

else:

print(num,"is a prime number")

else:

print(num,"is not a prime number")

Output:

Enter a number: 3

3 is a prime number

Enter a number: 15

15 is not a prime number

3 times 5 is 15

4.

num = int(input("Enter a Number : "))

factorial = 1

if num == 0:

print("The factorial of 0 is 1")

else:

for i in range(1,num + 1):

factorial = factorial\*i

print("The factorial of",num,"is",factorial)

Output:

Enter a Number : 5

The factorial of 5 is 120

5.

start=input("enter start day of month : ")

number=int(input("enter number of days : "))

week={"sunday":"0",

"monday":"1",

"tuesday":"2",

"wednesday":"3",

"thursday":"4",

"friday":"5",

"saturday":"6"}

start=int(week[start])

print("S M T W T F S")

for i in range(0,start):

print(" ",end="")

for i in range(1,7-start+1):

print(str(i)+" ",end="")

print()

for i in range(7-start+1,number+1):

if(len(str(i))==1):

print(str(i)+" ",end="")

elif(len(str(i))==2):

print(str(i)+" ",end="")

if i in range(7-start,number+1,7):

print()

print()

Output:

enter start day of month : tuesday

enter number of days : 28

S M T W T F S

1 2 3 4 5

6 7 8 9 10 11 12

13 14 15 16 17 18 19

20 21 22 23 24 25 26

27 28

6.

binary=[]

reverse=[]

while True:

Y=(input("enter binary: "))

if (Y=="stop"):

break

else:

binary.append(int(Y))

print(binary)

reverse=binary[::-1]

y=len(binary)

Sum=0

for i in range(y):

if (reverse[i]==1):

Sum=Sum + (reverse[i]\*(2\*\*i))

print("decimal: ",Sum)

Output:

enter binary: 0

enter binary: 1

enter binary: 0

enter binary: 1

enter binary: 1

enter binary: stop

[0, 1, 0, 1, 1]

decimal: 11

7.

a = int(input("Enter 1st Num = "))

b = int(input("Enter 2nd Num = "))

if(a==0 and b==0):

print("GCD is 0\n")

elif(a==0):

print("GCD is : ",b)

elif(b==0):

print("GCD is : ",a)

else:

if(a>b):

small=b

else:

small=a

for i in range(1,small+1):

if((a%i==0) and (b%i==0)):

gcd = i

print("\nResult = ",gcd)

Output:

Enter 1st Num = 5

Enter 2nd Num = 15

Result = 5

8.

for i in range(1,501):

if(i%3==0 and i%5==0):

print(str(i)," FizzBuzz")

elif(i%3==0):

print(str(i)," Fizz")

elif(i%5==0):

print(str(i)," Buzz")

Output:

3 Fizz

5 Buzz

6 Fizz

9 Fizz

10 Buzz

12 Fizz

15 FizzBuzz

18 Fizz

20 Buzz

21 Fizz

24 Fizz

25 Buzz

27 Fizz

30 FizzBuzz

33 Fizz

35 Buzz

36 Fizz

39 Fizz

40 Buzz …. …. ….

9.

size = int(input("Enter List Size : "))

list = []

sum = 0

for x in range(size):

value=int(input())

list.append(value)

print(list)

for i in range(size):

sum = sum+list[i]

print("Sum : ",sum)

Enter List Size : 5

1

2

3

4

5

[1, 2, 3, 4, 5]

Sum : 15

10.

lst = []

while True:

num = input("Enter List Value : ")

if(num=="STOP"):

break

else:

lst.append(int(num))

print(lst)

largest = 0

for x in lst:

if(x>largest):

largest=x

else:

break

print("\nLargest Number : ",largest)

Enter List Value : 3

Enter List Value : 5

Enter List Value : 4

Enter List Value : STOP

[3, 5, 4]

Largest Number : 5

11.

happy = []

sad = []

neutral = []

while True:

a=str(input("Enter you MOOd (happy,sad,nuetral) : "))

if(a=='happy'):

word=str(input("Enter a word for Happy : "))

happy.append(word)

elif(a=='sad'):

word=str(input("Enter a word for Sad : "))

sad.append(word)

elif(a=='neutral'):

word=str(input("Enter a word for Neutral : "))

neutral.append(word)

elif(a=='no'):

break

print(happy)

print(sad)

print(neutral)

Output:

Enter you MOOd (happy,sad,nuetral) : happy

Enter a word for Happy : glad

Enter you MOOd (happy,sad,nuetral) : sad

Enter a word for Sad : mad

Enter you MOOd (happy,sad,nuetral) : neutral

Enter a word for Neutral : stars

Enter you MOOd (happy,sad,nuetral) : no

['glad']

['mad']

['stars']