Input:

n=int(input("Enter a value: "))

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

print('-----------')

for j in range(1,11):

print(i,"\*",j,"=",i\*j)

Output:

Enter a value: 10

-----------

1 \* 1 = 1

1 \* 2 = 2

1 \* 3 = 3

1 \* 4 = 4

1 \* 5 = 5

1 \* 6 = 6

1 \* 7 = 7

1 \* 8 = 8

1 \* 9 = 9

1 \* 10 = 10

-----------

2 \* 1 = 2

2 \* 2 = 4

2 \* 3 = 6

2 \* 4 = 8

2 \* 5 = 10

2 \* 6 = 12

2 \* 7 = 14

2 \* 8 = 16

2 \* 9 = 18

2 \* 10 = 20

-----------

3 \* 1 = 3

3 \* 2 = 6

3 \* 3 = 9

3 \* 4 = 12

3 \* 5 = 15

3 \* 6 = 18

3 \* 7 = 21

3 \* 8 = 24

3 \* 9 = 27

3 \* 10 = 30

-----------

4 \* 1 = 4

4 \* 2 = 8

4 \* 3 = 12

4 \* 4 = 16

4 \* 5 = 20

4 \* 6 = 24

4 \* 7 = 28

4 \* 8 = 32

4 \* 9 = 36

4 \* 10 = 40

-----------

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

-----------

6 \* 1 = 6

6 \* 2 = 12

6 \* 3 = 18

6 \* 4 = 24

6 \* 5 = 30

6 \* 6 = 36

6 \* 7 = 42

6 \* 8 = 48

6 \* 9 = 54

6 \* 10 = 60

-----------

7 \* 1 = 7

7 \* 2 = 14

7 \* 3 = 21

7 \* 4 = 28

7 \* 5 = 35

7 \* 6 = 42

7 \* 7 = 49

7 \* 8 = 56

7 \* 9 = 63

7 \* 10 = 70

-----------

8 \* 1 = 8

8 \* 2 = 16

8 \* 3 = 24

8 \* 4 = 32

8 \* 5 = 40

8 \* 6 = 48

8 \* 7 = 56

8 \* 8 = 64

8 \* 9 = 72

8 \* 10 = 80

-----------

9 \* 1 = 9

9 \* 2 = 18

9 \* 3 = 27

9 \* 4 = 36

9 \* 5 = 45

9 \* 6 = 54

9 \* 7 = 63

9 \* 8 = 72

9 \* 9 = 81

9 \* 10 = 90

-----------

10 \* 1 = 10

10 \* 2 = 20

10 \* 3 = 30

10 \* 4 = 40

10 \* 5 = 50

10 \* 6 = 60

10 \* 7 = 70

10 \* 8 = 80

10 \* 9 = 90

10 \* 10 = 100

Input:

def prime(r):

prime\_count = 0

prime\_sum = 0

for n in range(2, r + 1):

count = 0

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

if n % i == 0:

count += 1

if count == 2:

print(n)

prime\_count+=1

print('Prime numbers range between 1 to 100: ',prime\_count)

prime(100)

Output:

2

3

5

7

11

13

17

19

23

29

31

37

41

43

47

53

59

61

67

71

73

79

83

89

97

Prime numbers range between 1 to 100: 25

Input:

n=int(input('Enter a number: '))

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

for j in range(1,n+1):

if (i+j)%2==0:

print((i,j))

Output:

Enter a number: 3

(1, 1)

(1, 3)

(2, 2)

(3, 1)

(3, 3)

Input:

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

count=0

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

for j in range(1,n+1):

if i%j==0:

print(j)

count+=1

print("total factors",count)

Output:

Enter a num: 5

1

1

2

1

3

1

2

4

1

5

total factors 10

Input:

n=int(input("enter a num"))

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

for j in range(i,n+1):

for k in range(1,n+1):

a=(i\*\*2)+(j\*\*2)

if a==k\*\*2:

print(i,j,k)

Output:

Enter a num: 5

3 4 5