## **QUESTION 1**

1.Write a program to print the numbers from 1 to 50 using a for loop.

### **Code Solution**

for i in range(1, 51):  
 print(i)

### **FINAL Output**



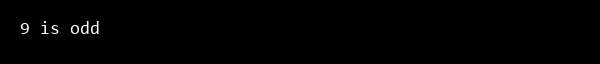
## **QUESTION 2**

2.Write a program that takes an integer as input and checks if it is even or odd.

### **Code Solution**

num = 9  
if num % 2 == 0:  
 print(num, "is even")  
else:  
 print(num, "is odd")

### **FINAL Output**



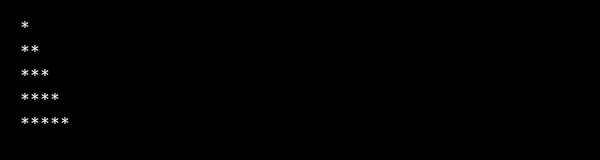
## **QUESTION 3**

3.Create a program that prints a right -angled triangle pattern of \* with a height of 5.

### **Code Solution**

for i in range(5):  
 print('\*' \* (i + 1))

### **FINAL Output**



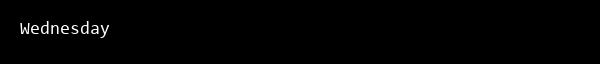
## **QUESTION 4**

4.Write a program that takes a number (1 -7) as input and prints the corresponding day of the week using a switch statement.

### **Code Solution**

def get\_day\_of\_week(number):  
 match number:  
 case 1:  
 return "Monday"  
 case 2:  
 return "Tuesday"  
 case 3:  
 return "Wednesday"  
 case 4:  
 return "Thursday"  
 case 5:  
 return "Friday"  
 case 6:  
 return "Saturday"  
 case 7:  
 return "Sunday"  
 case \_:  
 return "Invalid day number"  
  
day\_number = 3  
print(get\_day\_of\_week(day\_number))

### **FINAL Output**



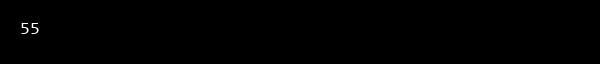
## **QUESTION 5**

5.Write a program to calculate the sum of all numbers from 1 to n using a while loop.

### **Code Solution**

n = 10  
sum = 0  
i = 1  
while i <= n:  
 sum = sum + i  
 i = i + 1  
print(sum)

### **FINAL Output**



## **QUESTION 6**

6.Write a program to check if a given number is prime or not using a for loop and if conditions.

### **Code Solution**

number = 17  
is\_prime = True  
  
if number <= 1:  
 is\_prime = False  
else:  
 for i in range(2, number):  
 if number % i == 0:  
 is\_prime = False  
 break  
  
if is\_prime:  
 print(number, "is a prime number")  
else:  
 print(number, "is not a prime number")

### **FINAL Output**

