

**LAB MANUAL OF**

**ARTIFICIAL INTELLIGENCE**

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**Information Technology**

**Roll No :**

**BIT-24S-005**

**COURSE:**

**Artificial Intelligence**

**SUBMITTED TO:**

**AQSA UMAR**

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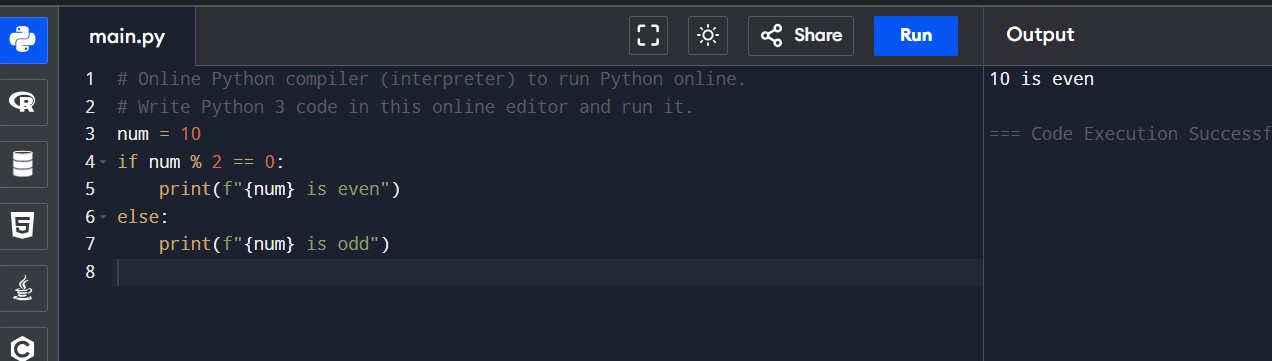
**TABLE OF CONTEXT**

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**(LAB TASKS)**

**LAB #01**

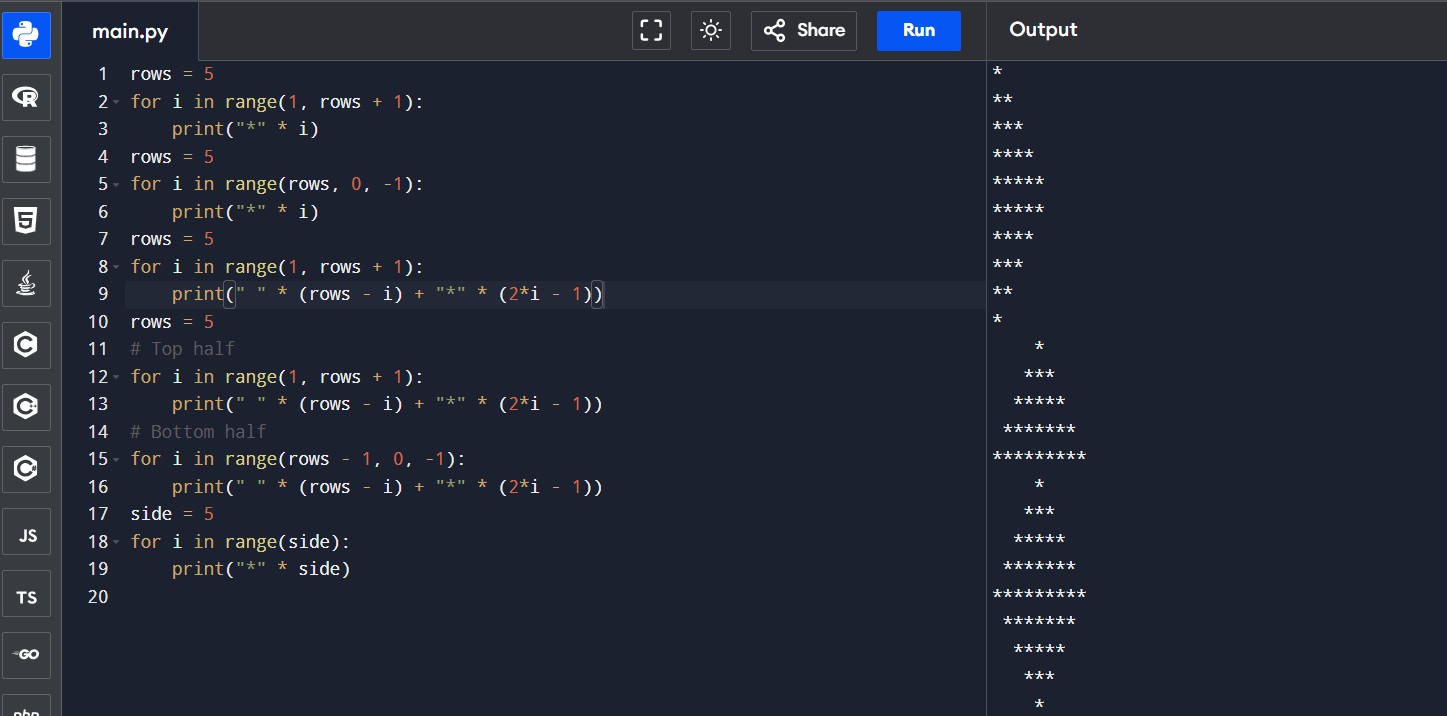
Q. MAKE 2 -2 PROGRAMS OF EACH DATA TYPE



A screenshot of a computer

AI-generated content may be incorrect.

# MAKE UP TO 5 SHAPE PROGRAMS USING



#MAKE SAME SHAPES YOU HAVE MADE IN TASK 2 USING \* MULTIPLE BY NUMBER

A screenshot of a computer program

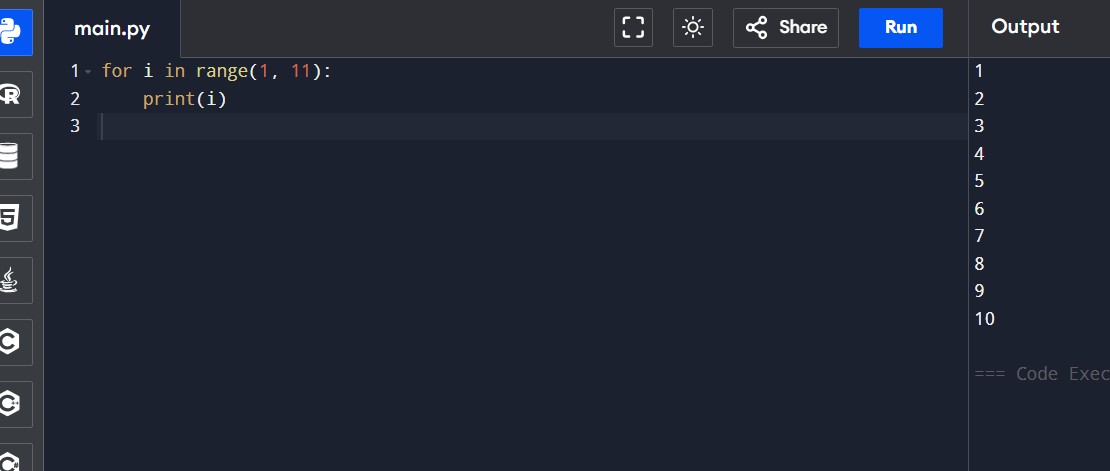
AI-generated content may be incorrect.

A screenshot of a cell phone

AI-generated content may be incorrect.

**LAB # 2**

#Print numbers from 1 to 10 using a for loop.



#Print all even numbers between 1 and 20 using a while loop.

A screenshot of a computer

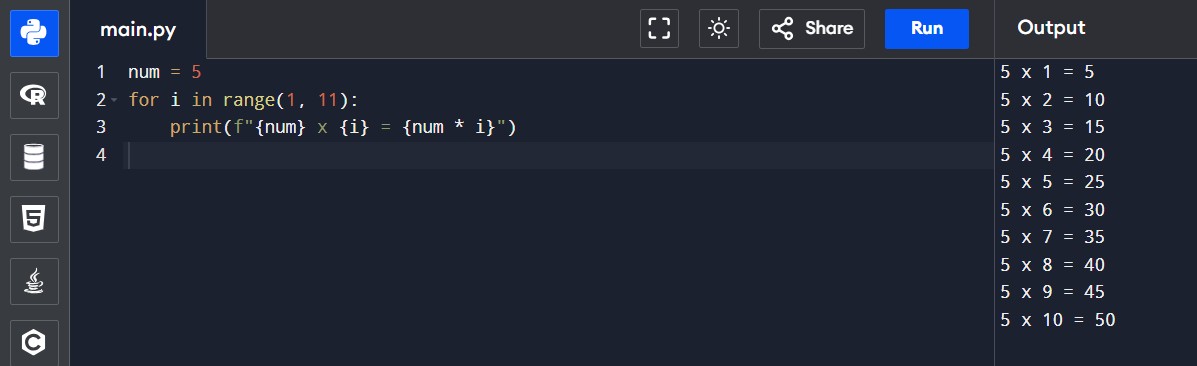
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#Calculate the sum of numbers from 1 to 100 using a loop.

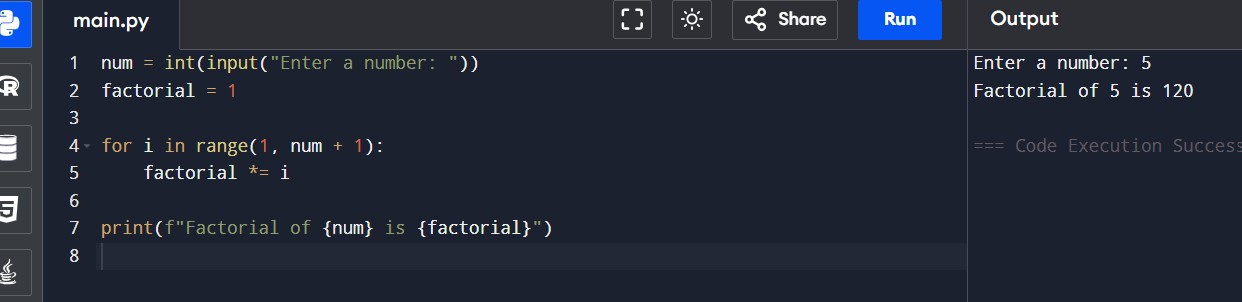
A screenshot of a computer

AI-generated content may be incorrect.

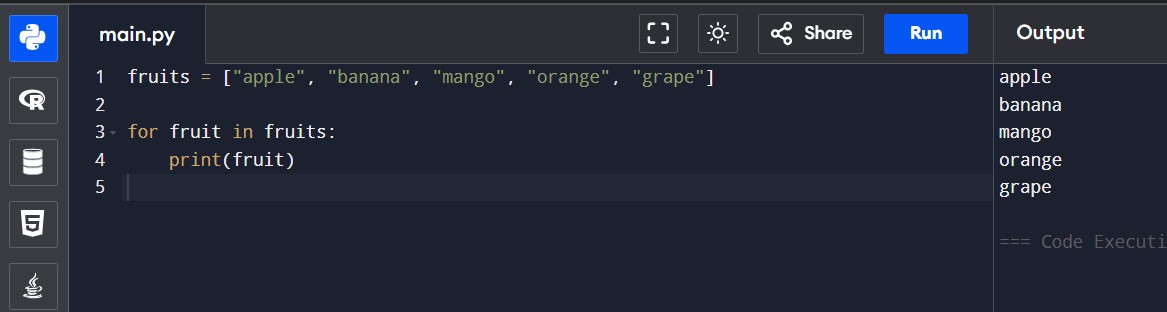
#Print the multiplication table of 5 using a loop.



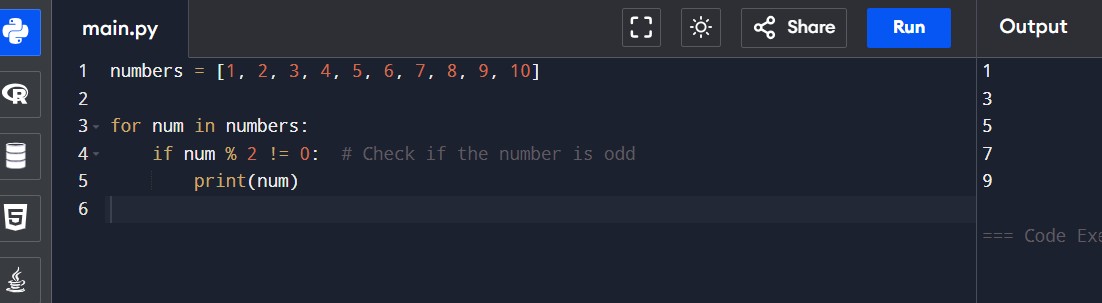
#Find the factorial of a given number using a for loop.



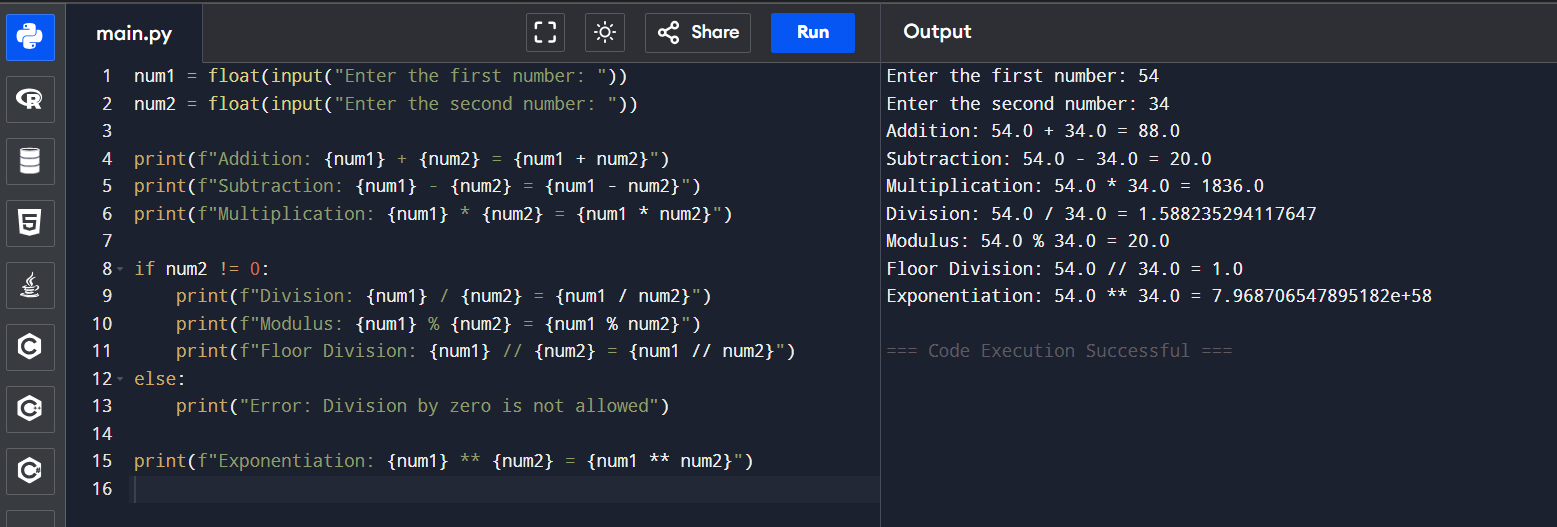
#Iterate over a list of fruits and print each item.



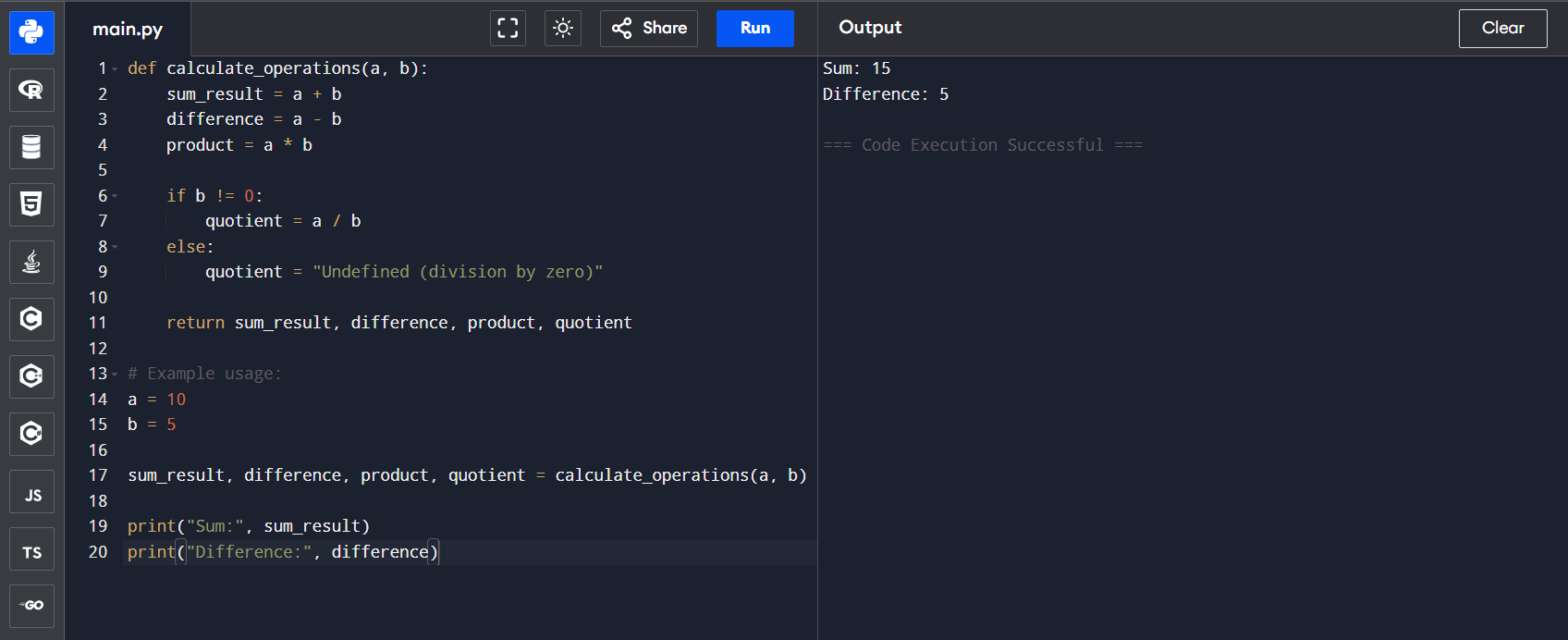
#Create a list of numbers and print only the odd numbers using a loop.



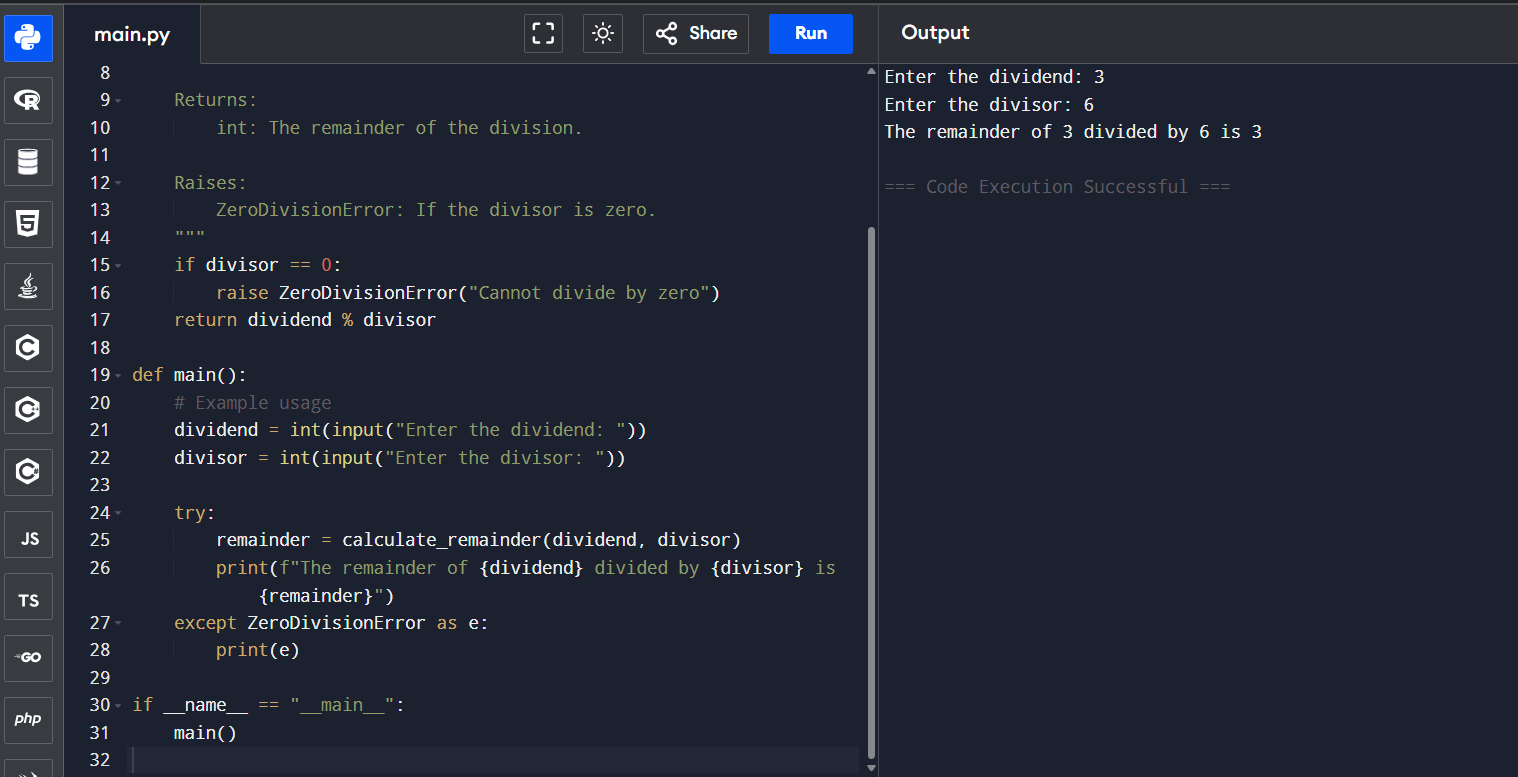
**LAB 04:**

# Write a python program to take two numbers as input and perform all arithmetic operators on them.

# Create a function that takes two numbers & returns their sum-sub-product-division.

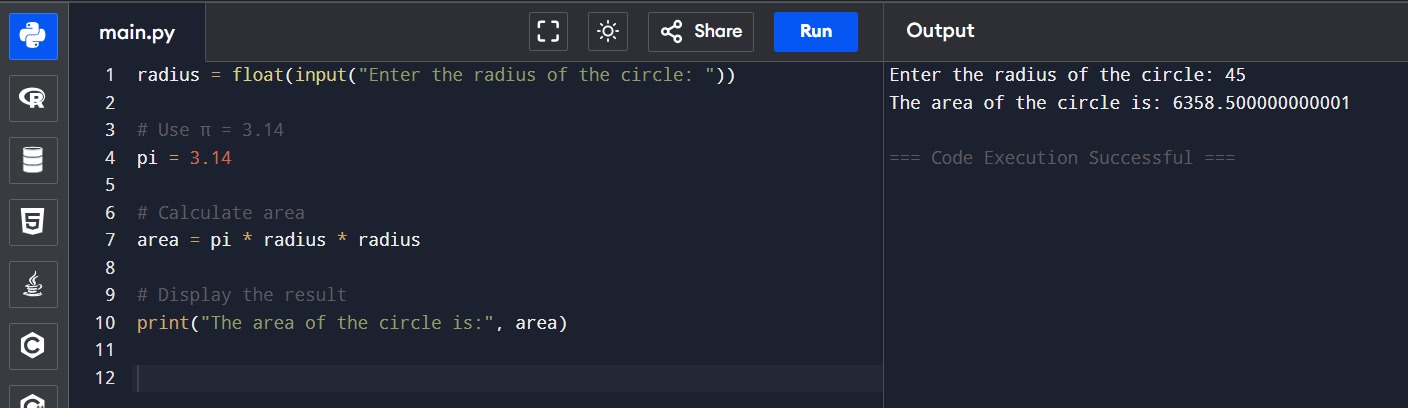


# Write a python script to find the remainder when one number is divided by another.

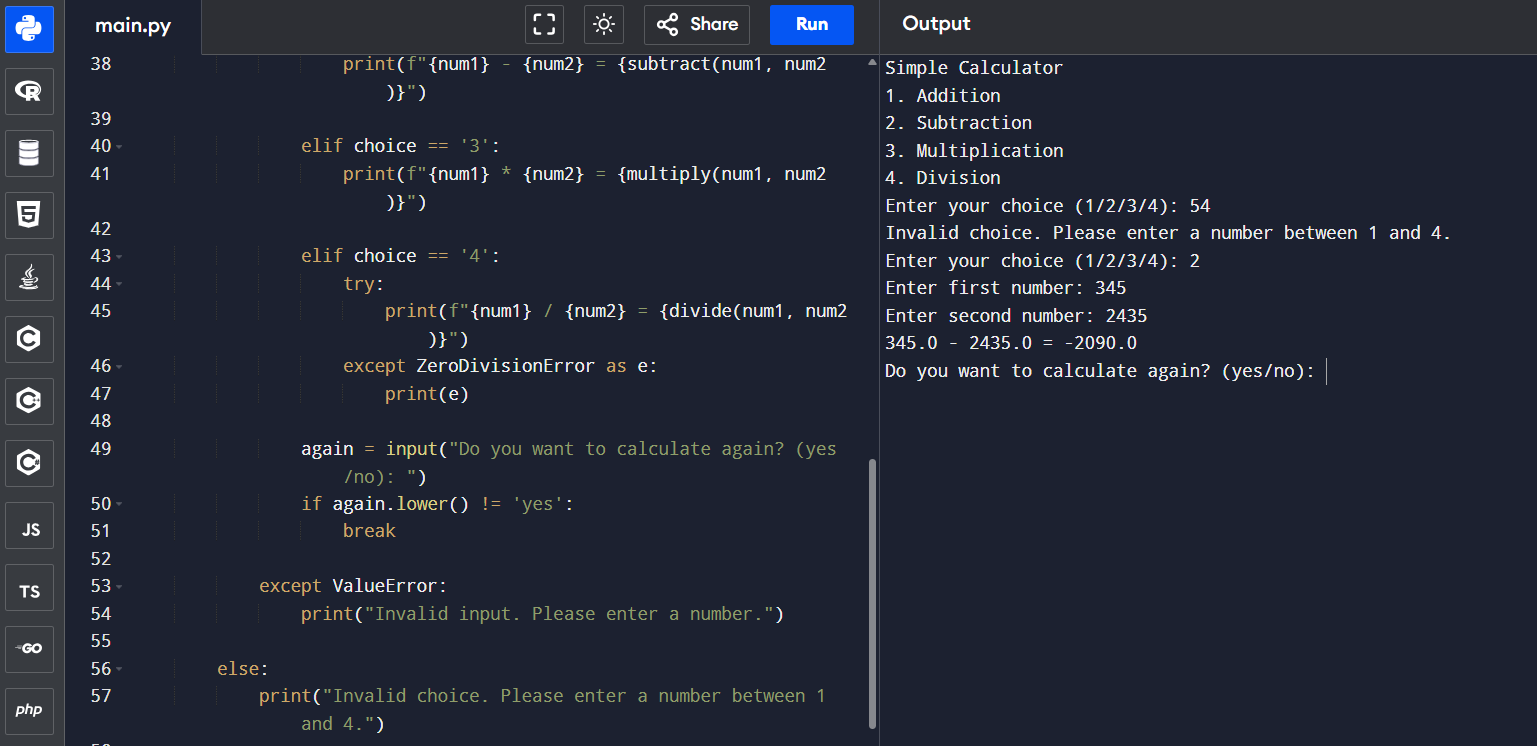


# Write a program to calculate the area of circle using the formula

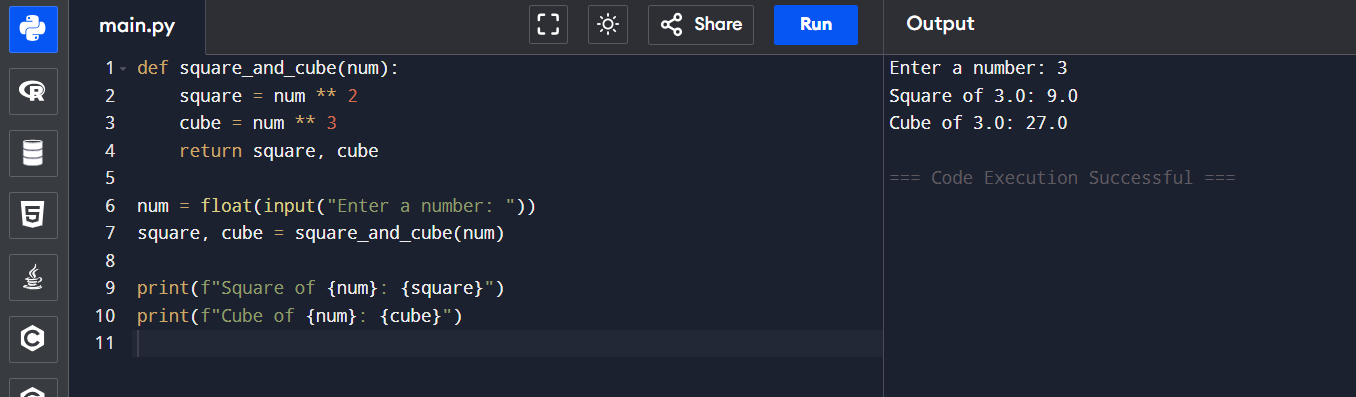
(Area =π\*r^2).



#Implement a program that takes a number as input & returns its square & cube using exponential.

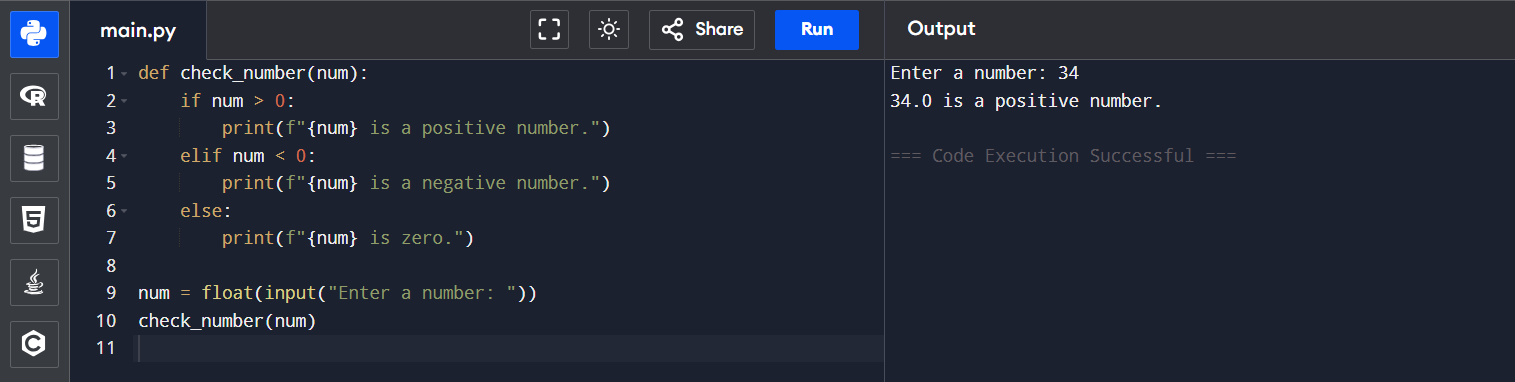


# Create a simple calculator in python that allows the user to choose an operation (addition, subtraction,etc) & inputs two numbers.

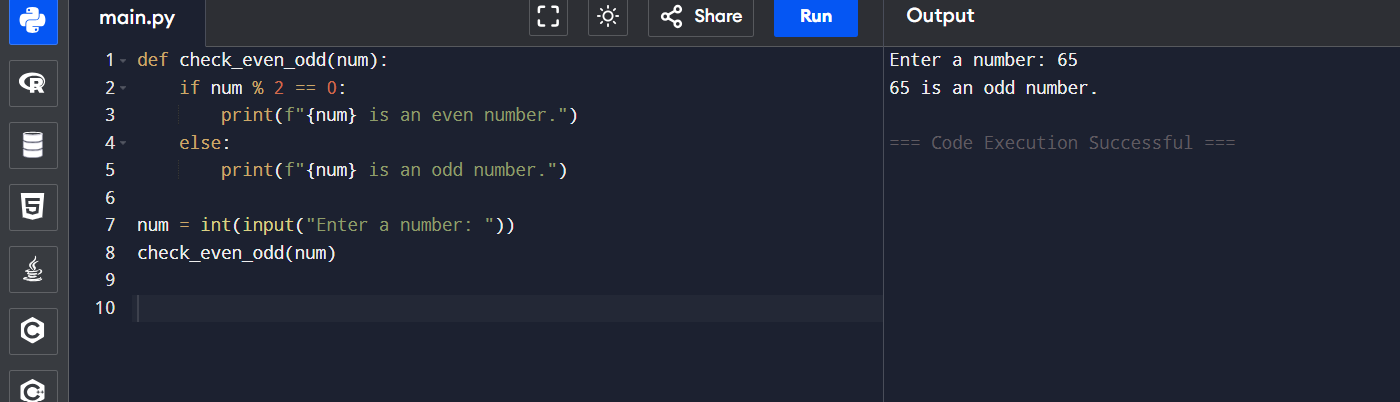


**LAB 05**

# Write a program that checks if a given number is positive, negative or zero.



# Write a program that takes user input & determines whether it’s an even or odd.

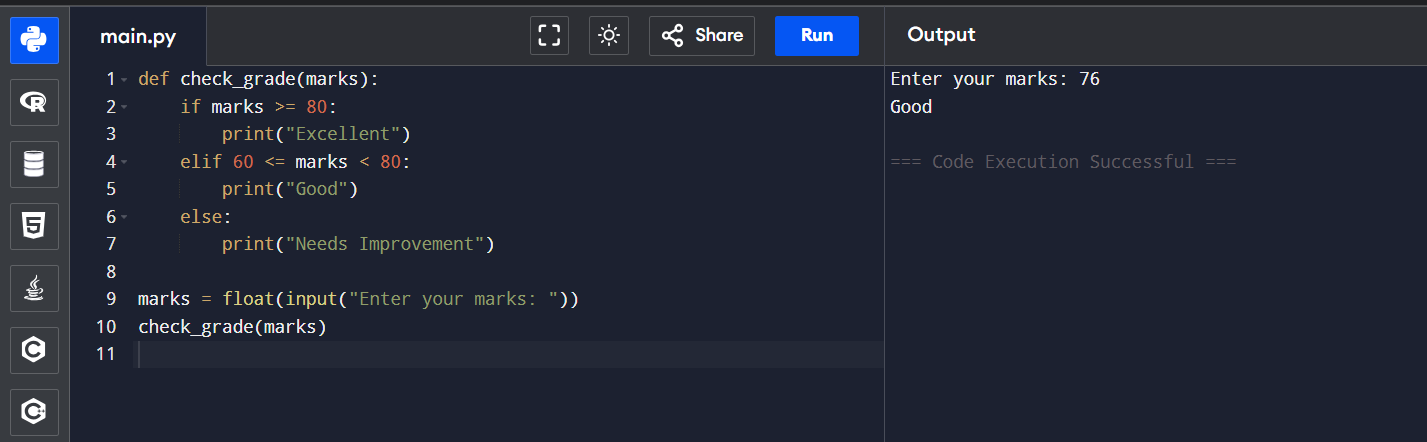


# Create a program that takes asks user to print

“excellent” if marks are above 80

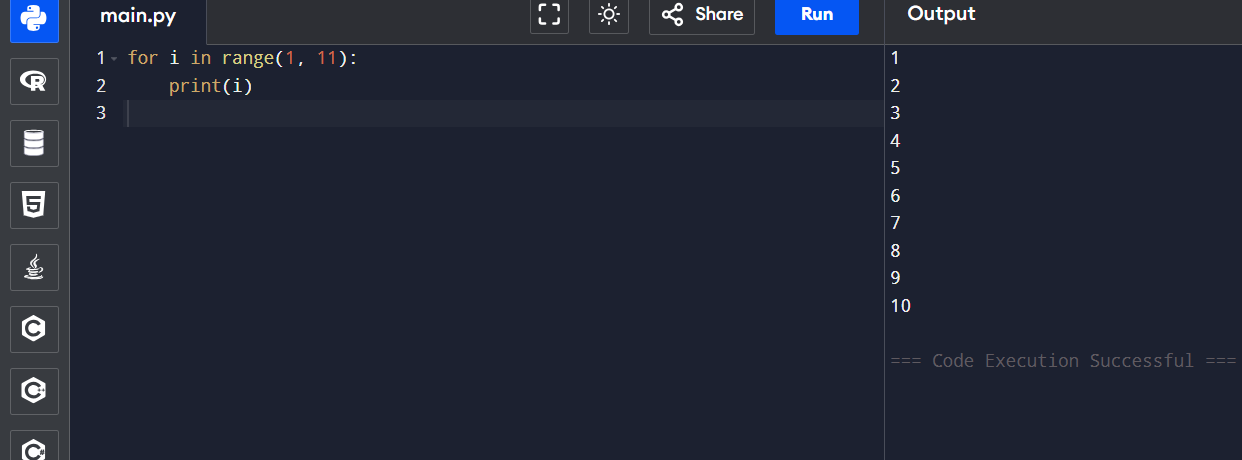
“good” if marks are between 60 to 80

“needs improvement” if marks are below 60.

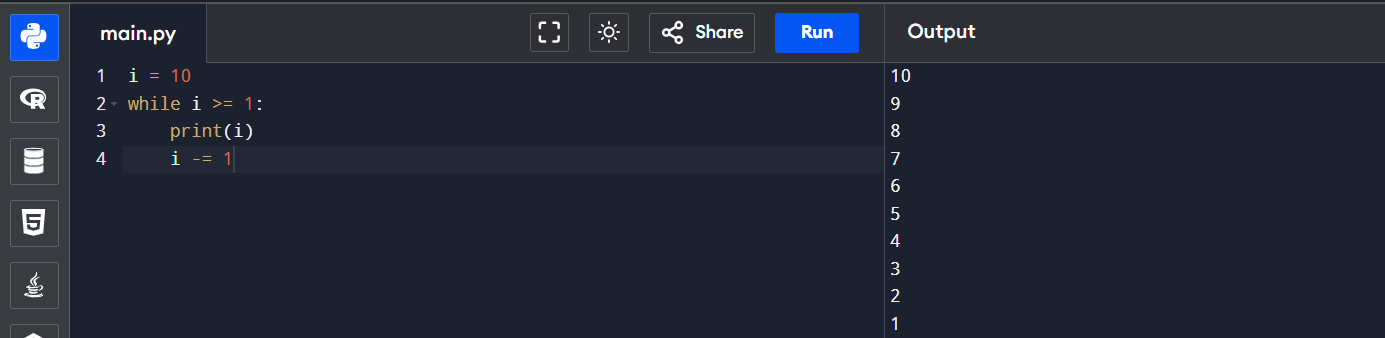


**LAB 06**

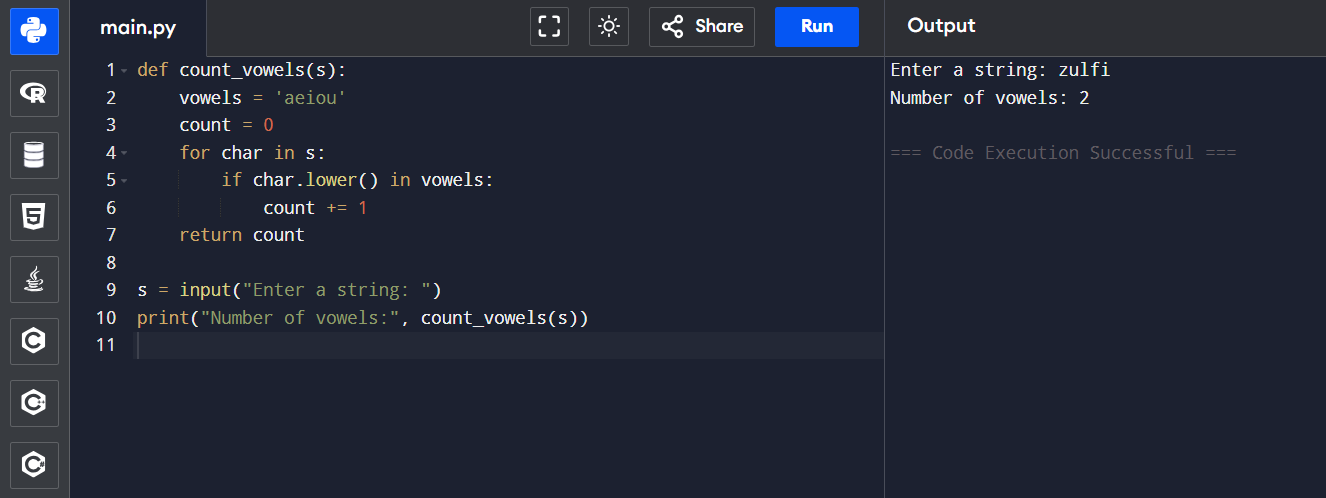
# Write a for loop to print the first 10 natural numbers.



# Write a while loop that prints numbers from 10 down to 1.



# Create a program that uses a for loop to iterate over a string & count the number of a vowels.



# Write a program that prints the Fibonacci series up to n terms using a while loop.

