JAVA ASSIGNMENT -2

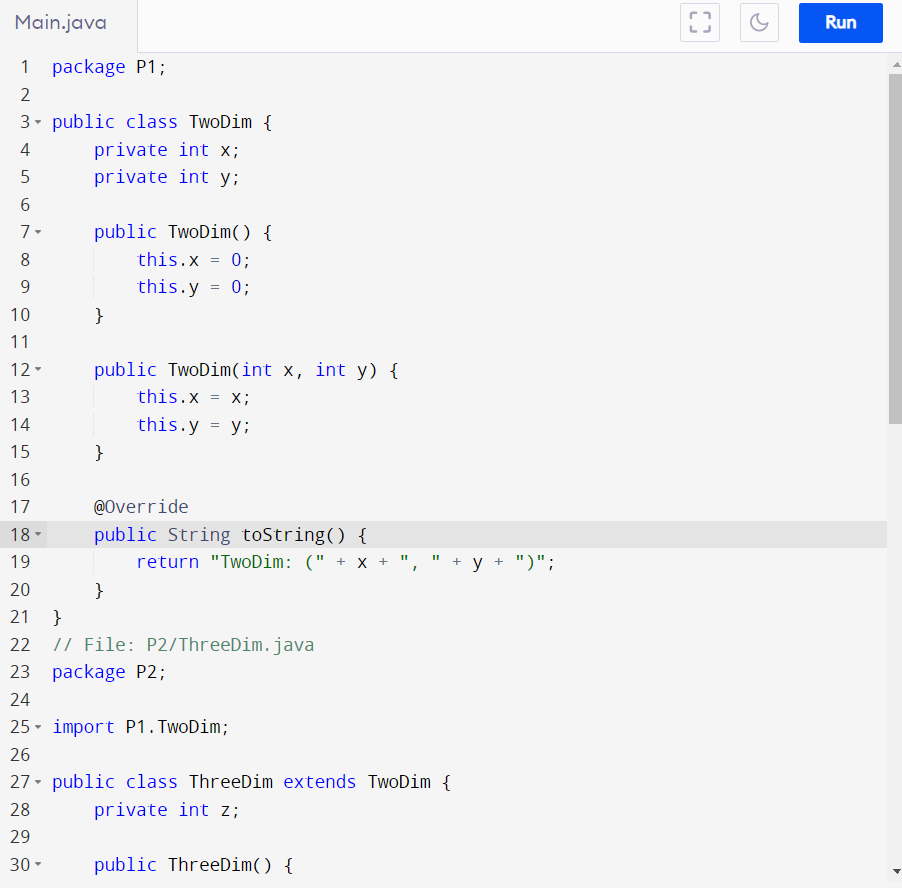
# NAME: N. Sri Vinuthna

# REG NO: 23MIC7038

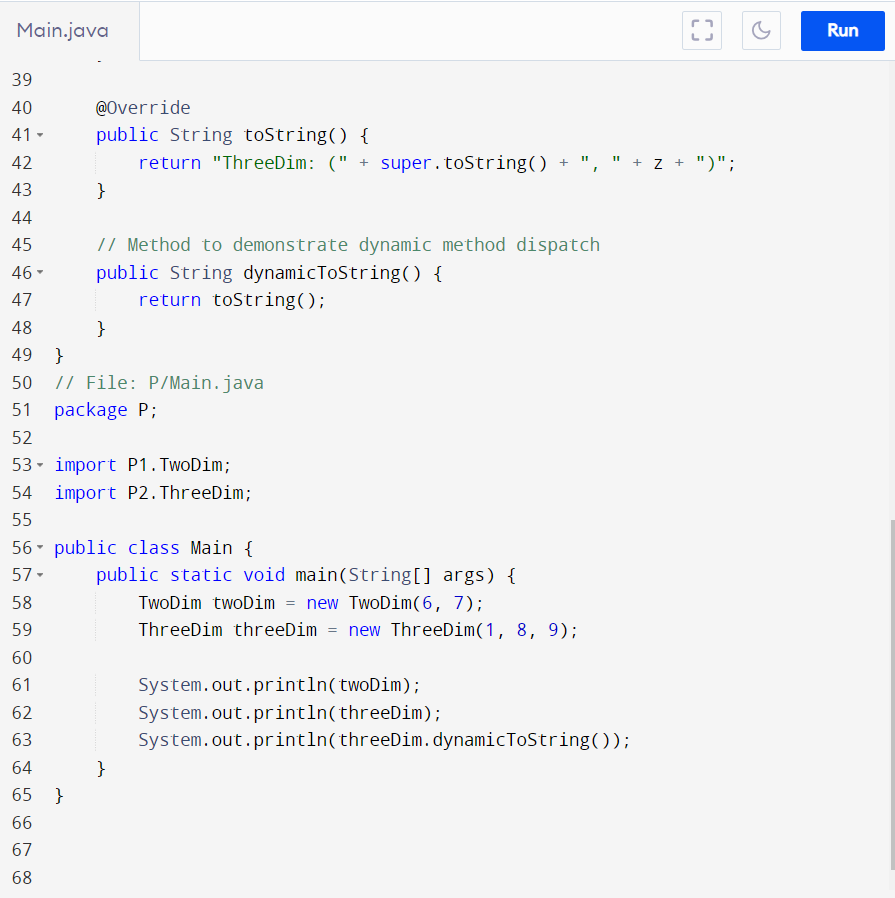
# QUESTION 1:

Create a class TwoDim which contains private members as x and y coordinates in package P1. Define the default constructor, a parameterized constructor and override toString() method to display the coordinates. Now reuse this class to create another class ThreeDim in package P2, adding a new dimension as z as its private member. Define the constructors for the subclass and override toString() method in the subclass also. write method toString() in such a way to show dynamic method dispatch. The main() function should be in a package P.

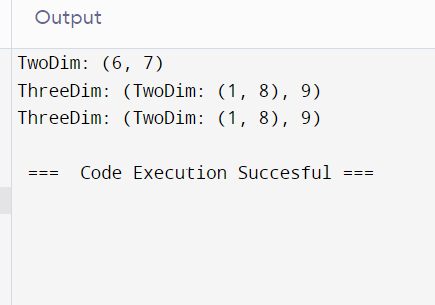
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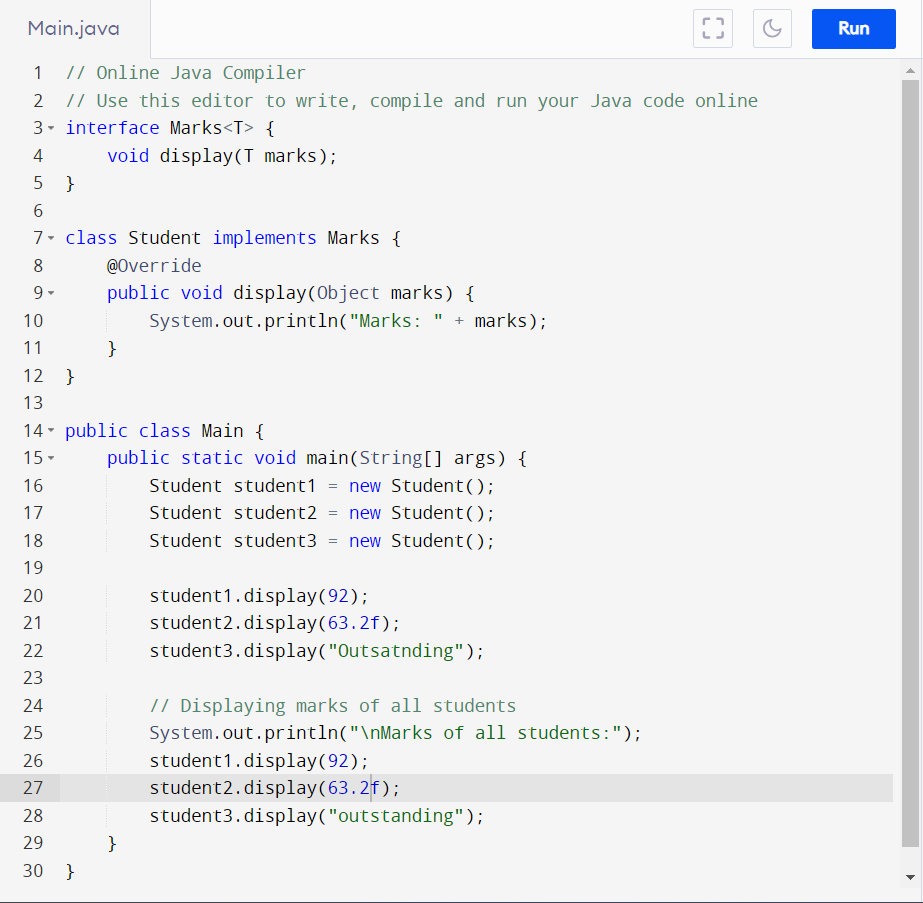
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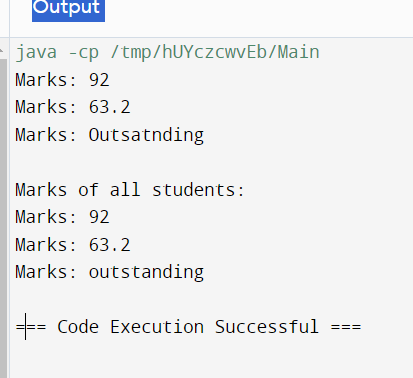
# QUESTION 2:

Write a Java program to create a generic interface called "Marks". Create three objects of the "Student" class which implements "Marks". Call the "Marks display" method (abstract) three times through three different objects by sending the marks of three students as the parameter. For the first student, the marks should be sent as an integer. For the second student, the marks should be sent as a float. Similarly, for the third student, the marks should be sent as a string. Finally, call the display() method available in the "Student" class to display the marks of all three students

# INPUT:



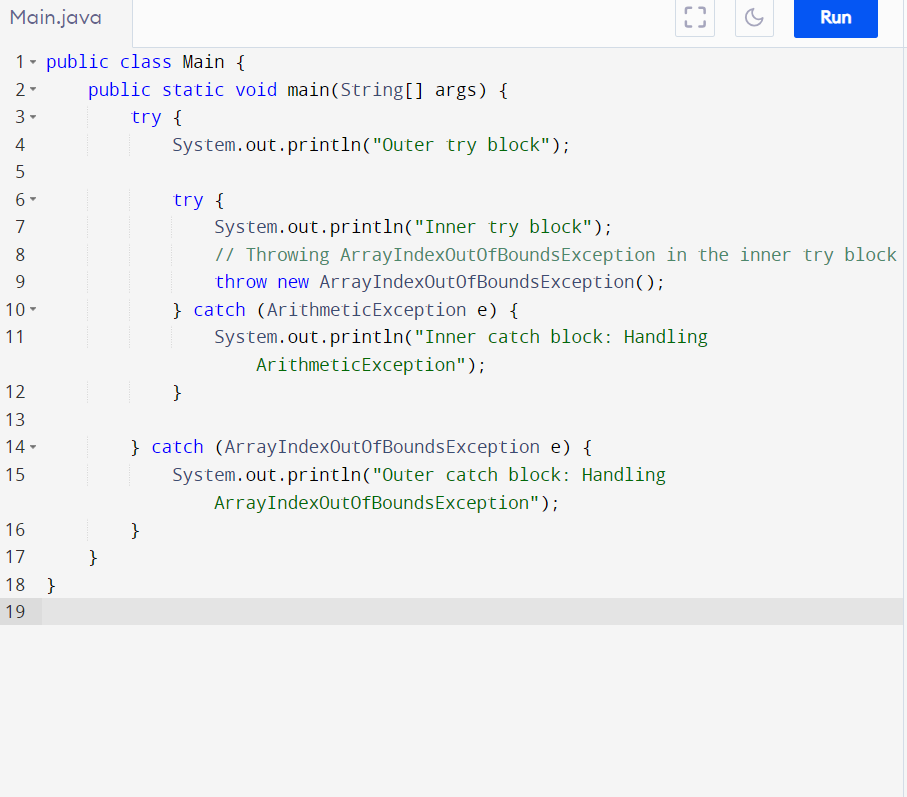
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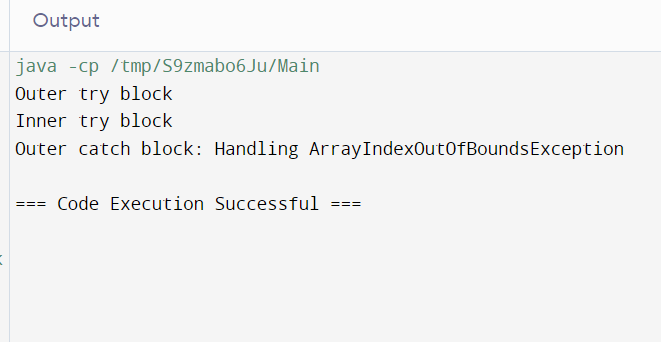
# QUESTION 3:

Write a Java program to prove that if any matching catch block is not found for a particular exception detected by an inner try block then, the parent "try" block will inspect for that exception if a match is found and the parent catch block will execute. Throw an ArrayindexOutOfBoundsException in the Inner "try block where the Inner "catch" can handle ArithmeticException only. However, the outer catch can handle ArrayindexOutOfBoundsException. Write a print statement in each block to display the sequence of execution.

# INPUT:



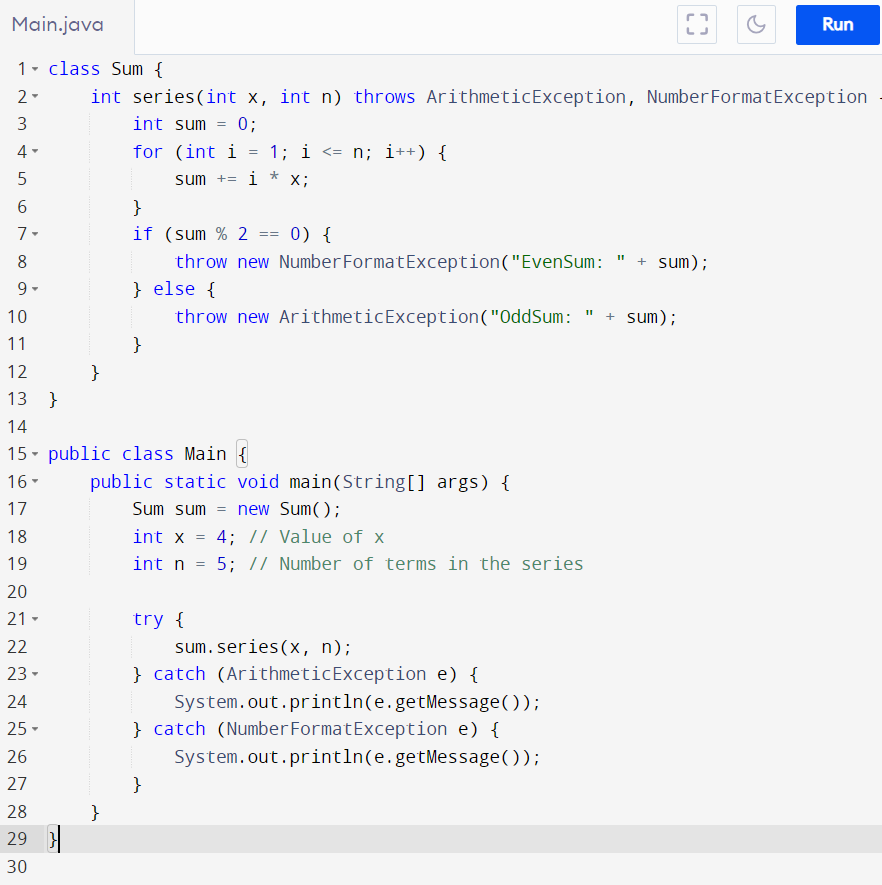
# OUTPUT:



# QUESTION 4:

Create a class Sum and a method series() to generate the series x+2x+3x+..+nx. Using throws, if the sum of the series is odd it has to raise an exception "ArithmeticException" and print the message "Odd Sum" with sum and if it is even it has to raise an exception "NumberFormatException" and print the message "EvenSum" with sum.

# INPUT:



# OUTPUT:

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