**Assignment No. 3**

**GRN:**

**Name of the Student:**

**Roll No.:**

**Class:**

**Division:**

**Batch:**

**Problem Statement**

Calculate area of triangle, square & circle using function overloading. Function parameter accept from user. Create Base Class **Shape** and Derived Classes **Triangle, Square, Circle** respectively. Implement **getInputs()** Method for accepting inputs, and Overload **setArea()** method for calculating area of respective shapes.

Use Class **Tester** for creating objects.

**Sample Input and Output**

|  |  |  |
| --- | --- | --- |
| **Sample Input/Parameter for Triangle** | **Values** | **Expected Output** |
| Height (H) | 50 | 2500 |
| Base (B) | 100 |

|  |  |  |
| --- | --- | --- |
| **Sample Input/Parameter for Circle** | **Values** | **Expected Output** |
| π (Pie) | 3.14 | 7853.98 |
| Radius (R) | 50 |

|  |  |  |
| --- | --- | --- |
| **Sample Input/Parameter for Square** | **Values** | **Expected Output** |
| Side (S) | 15 | 225 |

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| --- |
| **Add your code here**  **Expected Output:** |