

1. **Shape Abstract Class:**

- Fields: **l** (length) and **h** (height).
- **input** method to get user input for length and height.
- Abstract method **computeArea()**.

2. **Triangle Class (extends Shape):**

- Implements the **computeArea** method to calculate the area of a triangle using the formula $0.5 * \text{length} * \text{height}$.

3. **Rectangle Class (extends Shape):**

- Implements the **computeArea** method to calculate the area of a rectangle using the formula $\text{length} * \text{height}$.

4. **DynamicBinding Class (main class):**

- Creates instances of **Triangle** and **Rectangle**.
- Declares a reference variable **s** of type **Shape**.
- Assigns the reference of the **Triangle** object to **s**, demonstrating dynamic binding.
- Calls **input** and **computeArea** methods through the **s** reference, which is dynamically bound to the appropriate method based on the actual object type.

Explanation of Operations:

- The program creates instances of **Triangle** and **Rectangle**.
- A reference variable **s** of type **Shape** is declared.
- The **s** reference is assigned the reference of the **Triangle** object, demonstrating dynamic binding.
- The **input** and **computeArea** methods are called through the **s** reference, and the appropriate methods in the **Triangle** class are invoked.
- The **s** reference is then assigned the reference of the **Rectangle** object, and the **input** and **computeArea** methods are called, invoking the appropriate methods in the **Rectangle** class.

In summary, this program showcases dynamic binding through polymorphism, where the behavior of the **computeArea** method is determined at runtime based on the actual type of the object referenced by the **s** variable