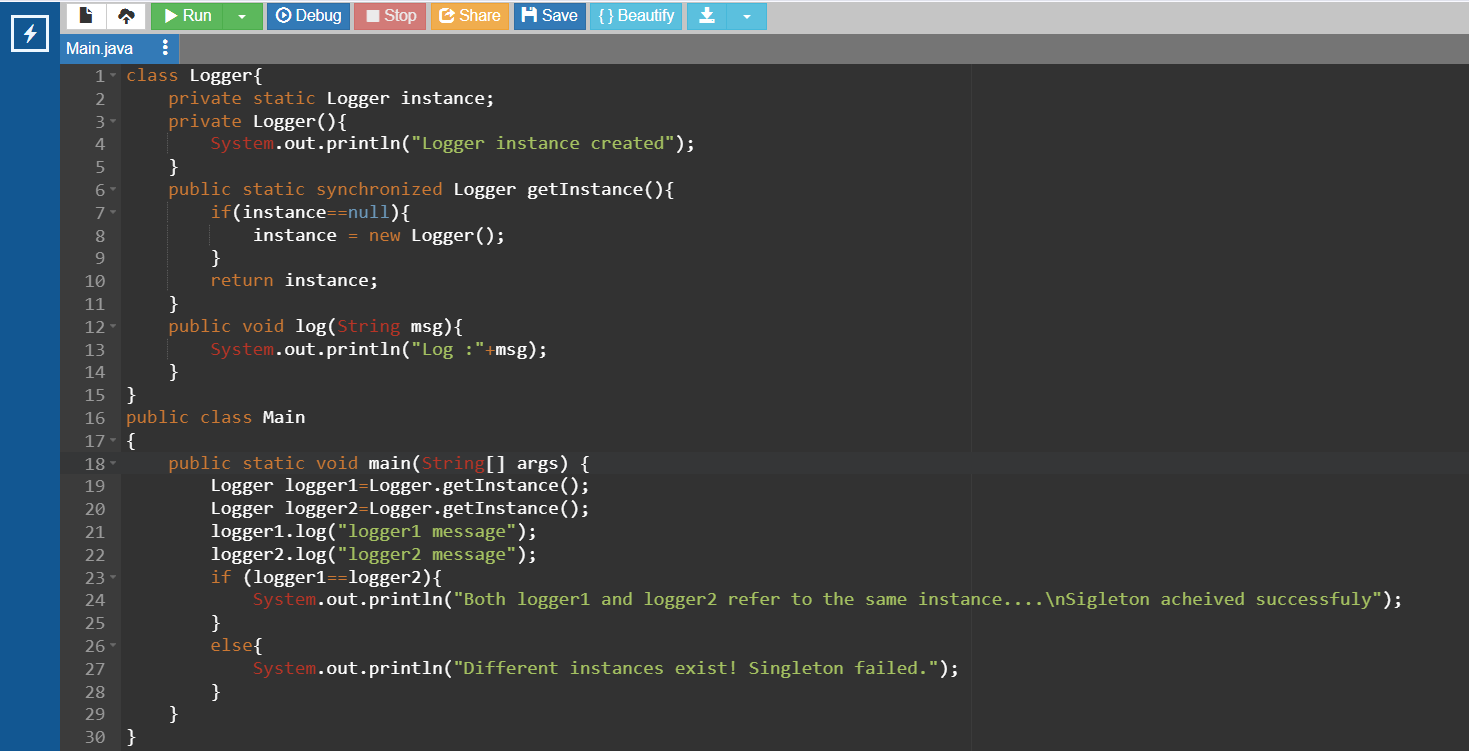
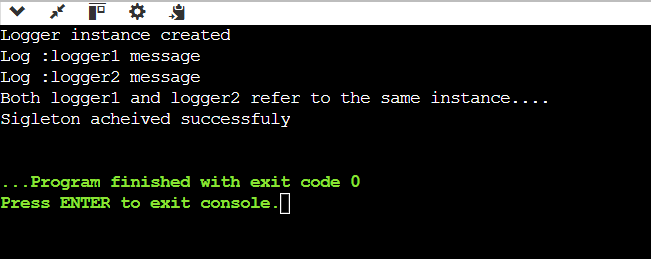
**Design Principles and Patterns**

**Exercise 1: Implementing the Singleton Pattern**

**Source code**:



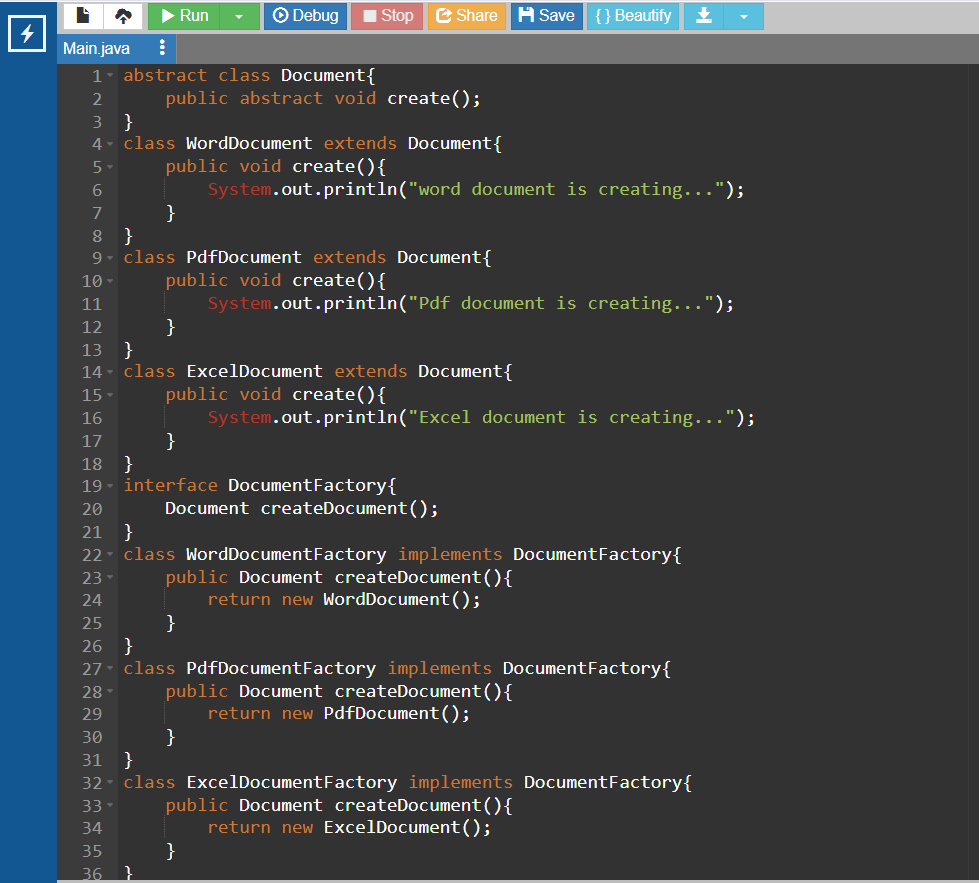
**Output:**

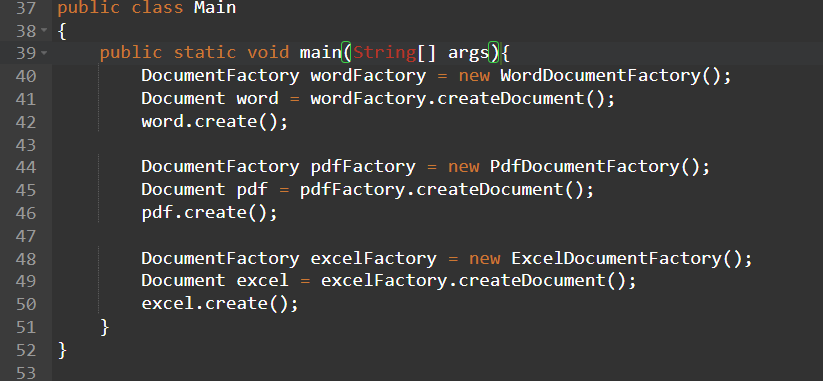
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**Design Principles and Patterns**

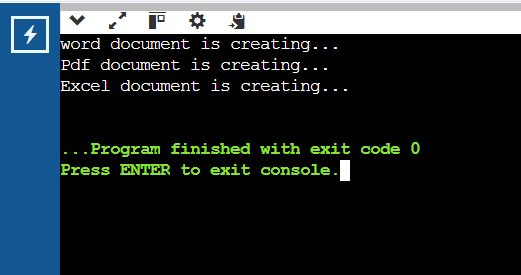
**Exercise 2: Implementing the Factory Method Pattern**

**Source code:**

****

****

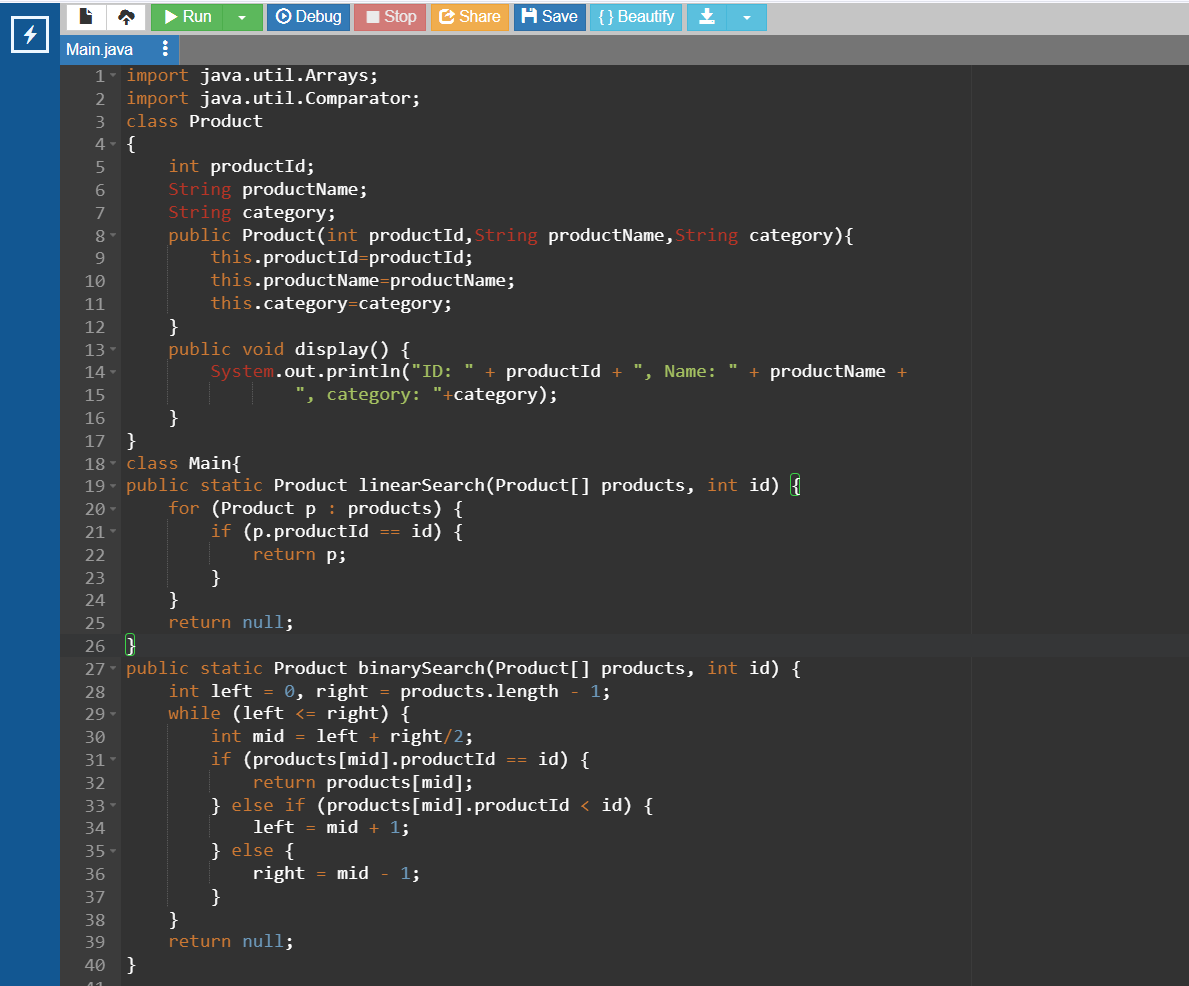
**Output:**

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**Data Structures and Algorithms:**

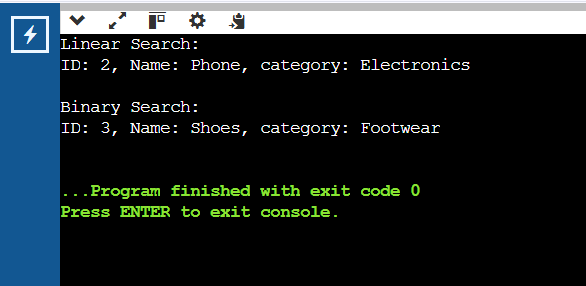
**Exercise 2: E-commerce Platform Search Function**

**Source Code:**

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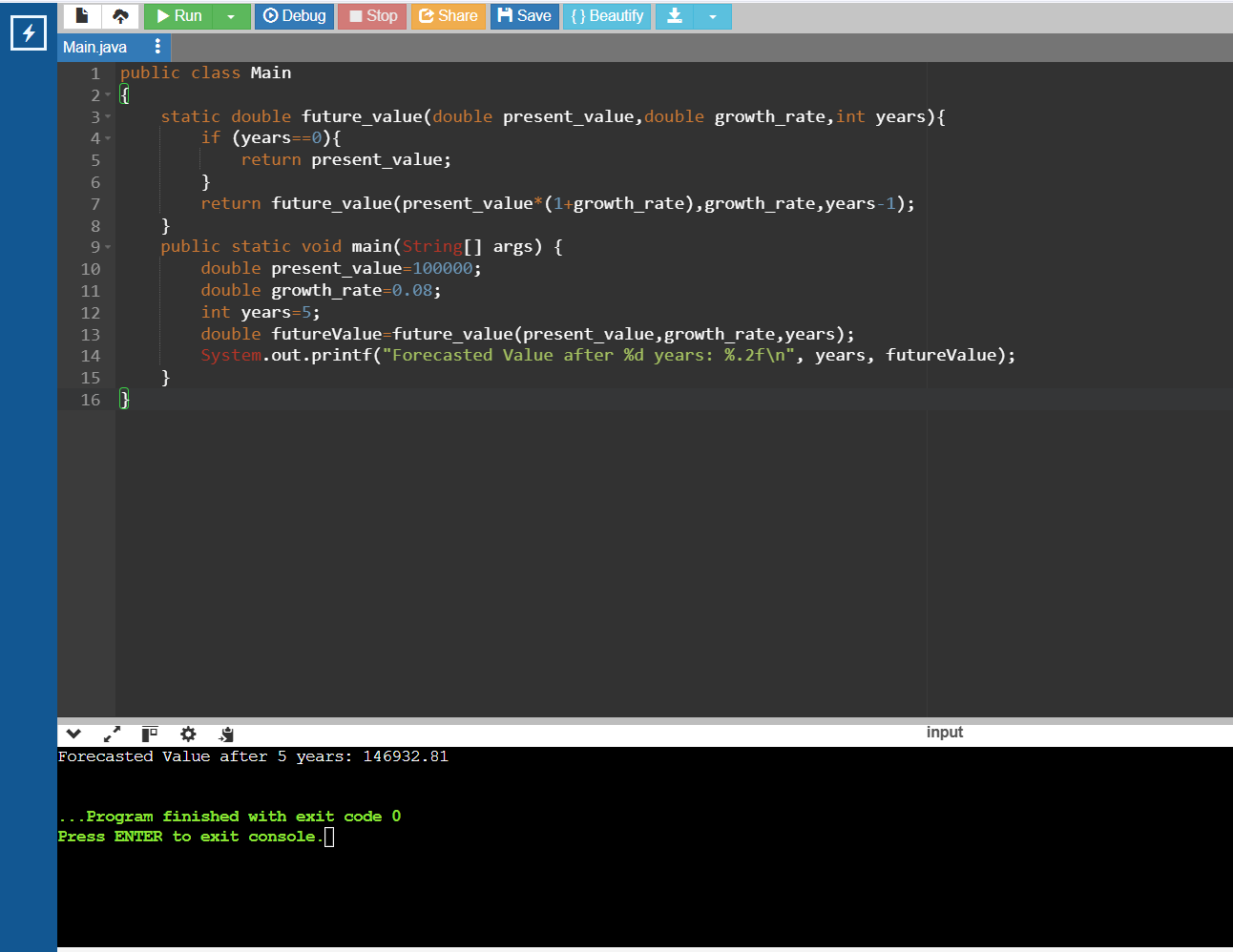
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**Output:**

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**Exercise 7: Financial Forecasting**

**Source Code:**

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