

**Assignment-1.** class name : Product data members : prdid, prddescription, batchcode, price, profit; method: addproduct() with args assign the values to datamembers and display to user (with args and no return value) calculate\_profit() if price>=10000 and <=100000 profit is 10% on price if price between 100000 to 500000 profit is 15% on price if price is >500000 profit is 20% on price (with return type and no args)

**Program:**

```
package javaprograms;

import java.util.Scanner;

public class Product
{
    // Data members
    private int product_id;
    private String product_description;
    private String batchcode;
    private double price;
    private double profit;

    // Method to add product with arguments and display to the user
    public void addProduct(int prdid, String prddescription, String batchcode,
double price) {
        this.product_id = prdid;
        this.product_description = prddescription;
        this.batchcode = batchcode;
        this.price = price;

        System.out.println("Product added successfully:");
        displayProductDetails();
    }

    // Method to calculate profit based on price
    public double calculateProfit() {
        if (price >= 10000 && price <= 100000) {
            profit = 0.10 * price;
        } else if (price > 100000 && price <= 500000) {
            profit = 0.15 * price;
        } else if (price > 500000) {
            profit = 0.20 * price;
        }

        return profit;
    }

    // Method to display product details
    private void displayProductDetails() {
        System.out.println("Product ID: " + product_id);
        System.out.println("Product Description: " + product_description);
        System.out.println("Batch Code: " + batchcode);
        System.out.println("Price: $" + price);
        System.out.println("Profit: $" + calculateProfit());
    }

    public static void main(String[] args)
    {
```

```

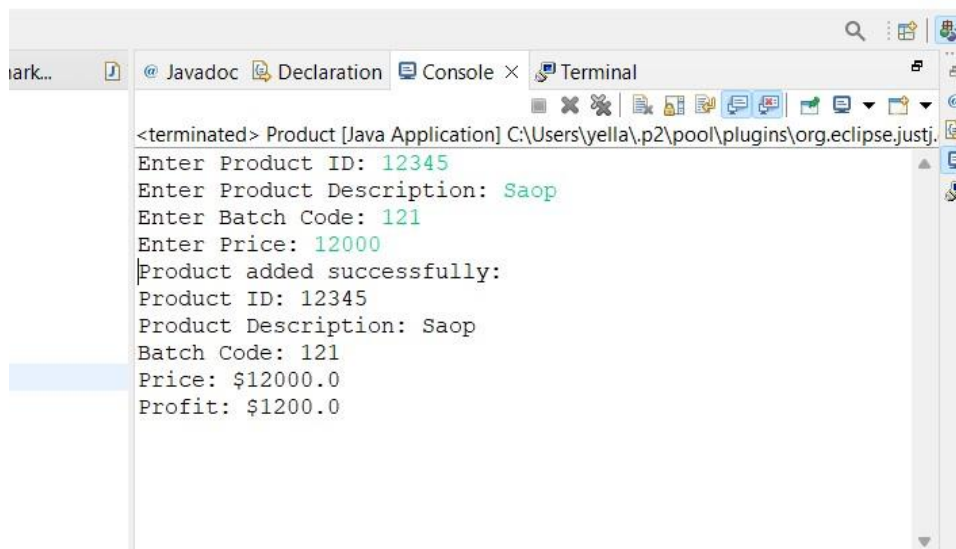
Product product = new Product();

Scanner scanner = new Scanner(System.in);
System.out.print("Enter Product ID: ");
int prdid = scanner.nextInt();
scanner.nextLine();
System.out.print("Enter Product Description: ");
String prddescription = scanner.nextLine();
System.out.print("Enter Batch Code: ");
String batchcode = scanner.nextLine();
System.out.print("Enter Price: ");
double price = scanner.nextDouble();

product.addProduct(prdid, prddescription, batchcode, price);
}
}

```

## Output:



```

<terminated> Product [Java Application] C:\Users\yella\.p2\pool\plugins\org.eclipse.justj...
Enter Product ID: 12345
Enter Product Description: Saop
Enter Batch Code: 121
Enter Price: 12000
Product added successfully:
Product ID: 12345
Product Description: Saop
Batch Code: 121
Price: $12000.0
Profit: $1200.0

```