

Assignment

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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 javapractice;
import java.util.Scanner;

public class Product {
    int prdid;
    String prddescription;
    String batchcode;
    double price;
    double profit;

    void addProduct(int prdid, String prddescription, String batchcode,
double price) {
        this.prdid = prdid;
        this.prddescription = prddescription;
        this.batchcode = batchcode;
        this.price = price;
    }

    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;
        } else {
            profit = 0; // No profit for price below 10,000
        }
        return profit;
    }

    void displayProduct() {
        System.out.println("Product ID: " + prdid);
        System.out.println("Product Description: " + prddescription);
    }
}
```

```
System.out.println("Batch Code: " + batchcode);  
System.out.println("Price: " + price);  
System.out.println("Profit: " + calculateProfit());  
}
```

```
public static void main(String[] args) {  
    Scanner obj = new Scanner(System.in);
```

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

```
    Product product = new Product();  
    product.addProduct(prdid, prddescription, batchcode, price);  
    product.displayProduct();
```

```
}  
}
```

Output:

```
Enter Product ID:  
1002  
Enter Product Description: good product  
Enter Batch Code: CWFA  
Enter Price: 12000  
Product ID: 1002  
Product Description: good product  
Batch Code: CWFA  
Price: 12000.0  
Profit: 1200.0
```