LAB_ANP_C6339_METHODS

Due date: Tuesday, 14 November 2023, 5:30 AM
Maximum number of files: 1
Type of work: Individual work

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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)

Solution:-

```
import java.util.Scanner;


public class Product {


    private int prdid;

    private String prddescription;

    private String batchcode;

    private double price;

    private double profit;


    public Product(int prdid, String prddescription, String batchcode, double price) {

        this.prdid = prdid;

        this.prddescription = prddescription;

        this.batchcode = batchcode;

        this.price = price;

        this.profit = 0;

    }


    public void addproduct() {
```

```java
        System.out.println("Product ID: " + prdid);

        System.out.println("Product Description: " + prddescription);

        System.out.println("Batch Code: " + batchcode);

        System.out.println("Price: " + price);

    }


    public double calculate_profit() {

        if (price >= 10000 && price <= 100000) {

            profit = price * 0.1;

        } else if (price > 100000 && price <= 500000) {

            profit = price * 0.15;

        } else if (price > 500000) {

            profit = price * 0.2;

        }

        return profit;

    }


    public static void main(String[] args) {

        Product product1 = new Product(1, "Product 1", "Batch 1", 100000);

        product1.addproduct();

        System.out.println("Profit: " + product1.calculate_profit());


            Product product2 = new Product(2, "Product 2", "Batch 2", 500000);

        product2.addproduct();

        System.out.println("Profit: " + product2.calculate_profit());


            Product product3 = new Product(3, "Product 3", "Batch 3", 600000);

        product3.addproduct();

        System.out.println("Profit: " + product3.calculate_profit());

    }

}

/*public class Product {
```

```java
    private int prdid;

    private String prddescription;

    private String batchcode;

    private double price;

    private double profit;


    public Product(int prdid, String prddescription, String batchcode, double price) {

        setProdid(prdid);

        setPrdDescription(prddescription);

        setBatchcode(batchcode);

        setPrice(price);

        setProfit(0);

    }


    public void setProdid(int prdid) {

        this.prdid = prdid;

    }


    public int getProdid() {

        return prdid;

    }


    public void setPrdDescription(String prddescription) {

        this.prddescription = prddescription;

    }


    public String getPrdDescription() {

        return prddescription;

    }


    public void setBatchcode(String batchcode) {

        this.batchcode = batchcode;

    }
```

```java
public String getBatchcode() {

    return batchcode;

}


public void setPrice(double price) {

    this.price = price;

}


public double getPrice() {

    return price;

}


public void setProfit(double profit) {

    this.profit = profit;

}


public double getProfit() {

    return profit;

}


public void addproduct() {

    System.out.println("Product ID: " + getProdid());

    System.out.println("Product Description: " + getPrdDescription());

    System.out.println("Batch Code: " + getBatchcode());

    System.out.println("Price: " + getPrice());

}


public double calculate_profit() {

    if (getPrice() >= 10000 && getPrice() <= 100000) {

        setProfit(getPrice() * 0.1);

    } else if (getPrice() > 100000 && getPrice() <= 500000) {

        setProfit(getPrice() * 0.15);

    } else if (getPrice() > 500000) {

        setProfit(getPrice() * 0.2);
```

```java
        }

        return getProfit();

    }


    public static void main(String[] args) {

        Product product1 = new Product(1, "Product 1", "Batch 1", 100000);

        product1.addproduct();

        System.out.println("Profit: " + product1.calculate_profit());


        Product product2 = new Product(2, "Product 2", "Batch 2", 500000);

        product2.addproduct();

        System.out.println("Profit: " + product2.calculate_profit());


        Product product3 = new Product(3, "Product 3", "Batch 3", 600000);

        product3.addproduct();

        System.out.println("Profit: " + product3.calculate_profit());

    }
}*/
```

Output:

```
C:\Users\thila\OneDrive\Desktop\Anudip_Labs>javac Product.java

C:\Users\thila\OneDrive\Desktop\Anudip_Labs>java Product
Product ID: 1
Product Description: Product 1
Batch Code: Batch 1
Price: 100000.0
Profit: 10000.0
Product ID: 2
Product Description: Product 2
Batch Code: Batch 2
Price: 500000.0
Profit: 75000.0
Product ID: 3
Product Description: Product 3
Batch Code: Batch 3
Price: 600000.0
Profit: 120000.0
```