Question-7

Class Diagram

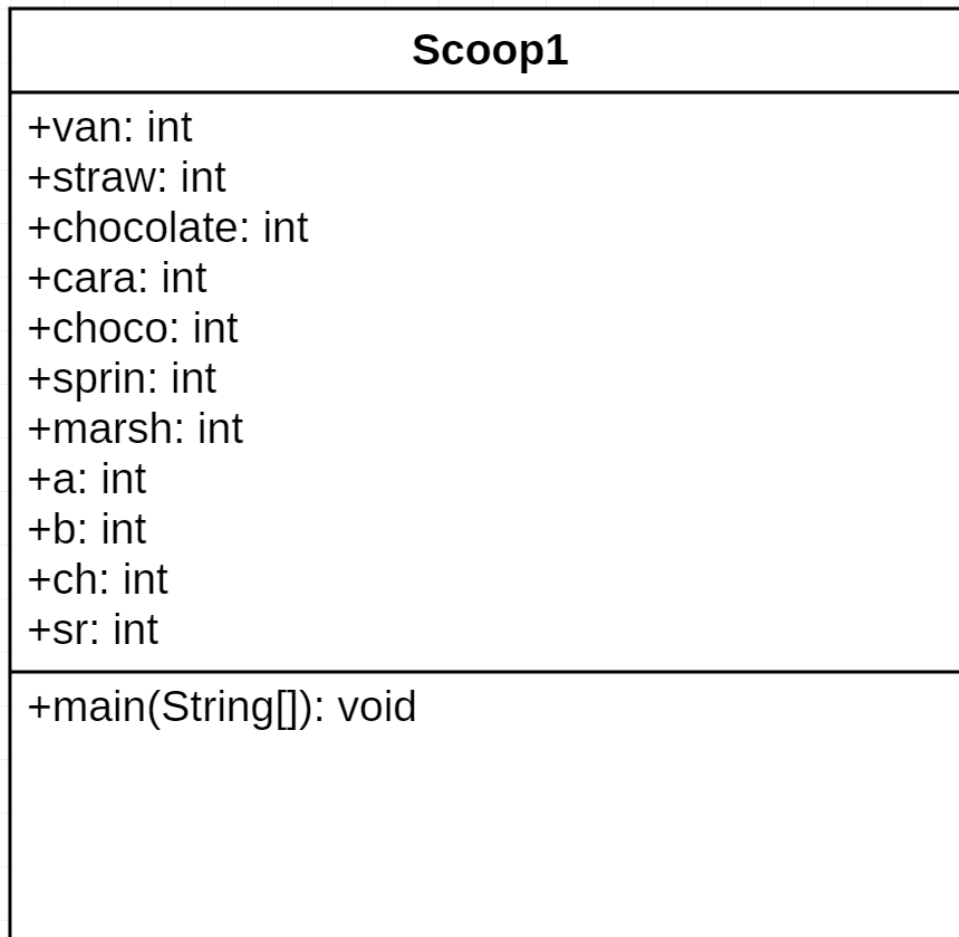| Scoop1 |
| --- |
| +van: int
+straw: int
+chocolate: int
+cara: int
+choco: int
+sprin: int
+marsh: int
+a: int
+b: int
+ch: int
+sr: int |
| +main(String[]): void |

Code

```java
Package exam2;

import java.util.*;
public class scoop1
{
      public static void main(String[] args)
      {
            Scanner sc=new Scanner(System.in);
            int van=50;
            int straw=60;
            int chocolate=70;
            int cara=20;
```

```java
int choco=30;
int sprin=40;
int marsh=50;
int a=0,b=0;


System.out.println("Select the option for required ice-cream");
System.out.println("1-Vanilla");
System.out.println("2-Strawberry");
System.out.println("3-Chocolate");
int opt=sc.nextInt();
if(opt==1)
{
        a=50;
        int x=0;
        while(true)
        {
        System.out.println("Select the required topping");
        System.out.println("1-Caramel");
        System.out.println("2-Choco-Chips");
        System.out.println("3-Sprinkles");
        System.out.println("4-Marsh Mellow");
        System.out.println("5-Thats all for me");
        int ch=sc.nextInt();
        if(ch==5)
                break;
        System.out.println("Enter number of Servings");
        int sr=sc.nextInt();
        if(ch==1)
                b=b+sr*cara;
        else if(ch==2)
                b=b+sr*choco;
        else if(ch==3)
                b=b+sr*sprin;
        else if(ch==4)
                b=b+sr*marsh;

        }
        b=a+b;


}
else if(opt==2)
{
        a=60;
        while(true)
        {
        System.out.println("Select the required topping");
        System.out.println("1-Caramel");
        System.out.println("2-Choco-Chips");
        System.out.println("3-Sprinkles");
        System.out.println("4-Marsh Mellow");
        System.out.println("5-Thats all for me");
        int ch=sc.nextInt();
        if(ch==5)
                break;
        System.out.println("Enter number of Servings");
        int sr=sc.nextInt();
        if(ch==1)
```

```java
                b=b+sr*cara;
        else if(ch==2)
                b=b+sr*choco;
        else if(ch==3)
                b=b+sr*sprin;
        else if(ch==4)
                b=b+sr*marsh;

        }
        b=a+b;
        if(opt==3)
        {
                a=70;
                while(true)
                {
                System.out.println("Select the required topping");
                System.out.println("1-Caramel");
                System.out.println("2-Choco-Chips");
                System.out.println("3-Sprinkles");
                System.out.println("4-Marsh Mellow");
                System.out.println("5-Thats all for me");
                int ch=sc.nextInt();
                if(ch==5)
                        break;
                System.out.println("Enter number of Servings");
                int sr=sc.nextInt();
                if(ch==1)
                        b=b+sr*cara;
                else if(ch==2)
                        b=b+sr*choco;
                else if(ch==3)
                        b=b+sr*sprin;
                else if(ch==4)
                        b=b+sr*marsh;

                }
                b=a+b;
        }

    }
     System.out.println("Total cost for the Ice-Cream is"+b);




    }

}
```