**Actual Code:**

package upcapp;

import java.util.Scanner;

/\*\*

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public class UPCApp {

public static void main(String[] args) {

Scanner sc1 = new Scanner(System.in);

int n1 = 0, n2 = 0, n3 = 0, n4 = 0, n5 = 0, n6 = 0, n7 = 0, n8 = 0, n9 = 0, n10 = 0, n11 = 0; // initialize inputs

int checkDigit = 0, sum = 0;

System.out.println("Enter n1 ="); n1 = sc1.nextInt();

System.out.println("Enter n2 ="); n2 = sc1.nextInt();

System.out.println("Enter n3 ="); n3 = sc1.nextInt();

System.out.println("Enter n4 ="); n4 = sc1.nextInt();

System.out.println("Enter n5 ="); n5 = sc1.nextInt();

System.out.println("Enter n6 ="); n6 = sc1.nextInt();

System.out.println("Enter n7 ="); n7 = sc1.nextInt();

System.out.println("Enter n8 ="); n8 = sc1.nextInt();

System.out.println("Enter n9 ="); n9 = sc1.nextInt();

System.out.println("Enter n10 ="); n10 = sc1.nextInt();

System.out.println("Enter n11 ="); n11 = sc1.nextInt();

sum = 3\*n1 + n2 + 3\*n3 + n4 + 3\*n5 + n6 + 3\*n7 + n8 + 3\*n9 + n10 + 3\*n11;

checkDigit = 10 - (sum % 10); // calculate checkDigit

System.out.println(" Sum = " + sum);

System.out.println(" Check Digit= " + checkDigit);

sc1.close();

}

}

**INPUT/OUTPUT - (using Heinz 20 oz ketchup bottle)**

run:

Enter n1 =

0

Enter n2 =

1

Enter n3 =

3

Enter n4 =

0

Enter n5 =

0

Enter n6 =

0

Enter n7 =

0

Enter n8 =

0

Enter n9 =

6

Enter n10 =

4

Enter n11 =

0

Sum = 32

Check Digit= 8

BUILD SUCCESSFUL (total time: 43 seconds)

Flow Chart

END

Initialize all variables

Start

Input:

Product Code

Output:

sum and checkDigit

Calculate Sum

Calculate checkDigit