

2/26/2023

Lab 5

Qalandar bux



Oop(java)

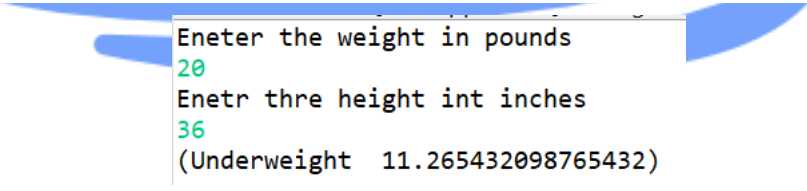
023-22-0273

Task 1

```
package lab5;
import java.util.Scanner;
class BMI1{
    static double BMI;
    public static double calcuateBMI(double weight, double height) {
        BMI=(weight/(height*height))*730;
        return BMI;
    }
    public static String findStatus(double bmi) {
        if(bmi<18.5) {
            return "("+"Underweight "+" "+bmi+"")";
        }
        else if(bmi>18.5 && bmi<24.9) {
            return "("+"normal"+" "+bmi+"")";
        }
        else if(bmi>25.0 && bmi<29.9) {
            return "("+"overweight"+" "+bmi+"")";
        }
        else {
            return "("+"obsese"+" "+bmi+"")";
        }
    }
}

public class BMI {
    public static void main(String []args) {
        BMI1 obj=new BMI1();
        double weight,height;
        Scanner input =new Scanner(System.in);
        System.out.print("Eneter the weight in pounds ");
        weight =input.nextDouble ();
        System.out.print("Enetr thre height int inches");
        height=input.nextDouble();
        double BMI=BMI1.calcuateBMI(weight ,height);
        System.out.print(BMI1.findStatus(BMI));
    }
}
```

output

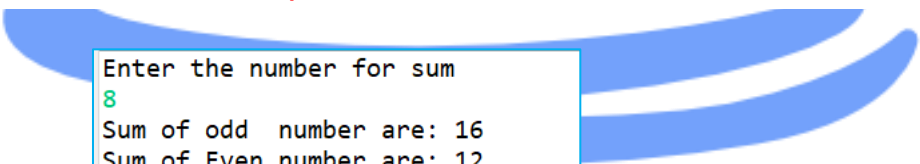
A screenshot of a terminal window showing the output of the BMI program. The text is displayed on a white background with a blue header bar. The output consists of three lines: a prompt to enter weight, a user input of 20, a prompt to enter height, a user input of 36, and the final calculated BMI status and value.

```
Eneter the weight in pounds
20
Enetr thre height int inches
36
(Underweight  11.265432098765432)
```

Task 2

```
package lab5;
import java.util.Scanner;
class Sum1{
public static int computeOdd(int input) {
int sum=0 ;
for(int i=0;i<input ;i++) {
if(i%2==1) {
sum+=i;
}
}
return sum;
}
public static int computeEven(int input) {
int sum=0;
for(int i=0;i<input;i++) {
if(i%2==0) {
sum+=i;
}
}
return sum;
}
}
public class Sum {
public static void main(String []args) {
Sum1 obj=new Sum1();
Scanner input=new Scanner(System.in);
int number;
do {
System.out.print("Enter the number for sum");
number=input.nextInt();
System.out.println("Sum of odd number are: "+Sum1.computeOdd(number));
System.out.println("Sum of Even number are: "+Sum1.computeEven(number));
}while(number!=-1);
}
}
```

output



```
Enter the number for sum
8
Sum of odd number are: 16
Sum of Even number are: 12
Enter the number for sum
5
Sum of odd number are: 4
Sum of Even number are: 6
Enter the number for sum
-1
```

Task 3

```
package lab5;

class Book{
String bookCategory,Author , Title,Publisher;
int sellingprice;
static int Quantity;
static int sold;
Book(String bookCategory,String Author , String Title,String Publisher,int
sellingprice,int Quantity){
this.bookCategory=bookCategory;
this.Author=Author;
this.Title=Title;
this.Publisher=Publisher;
this.sellingprice=sellingprice;
this.Quantity=Quantity;
}
public void DisplayQuantity() {
System.out.println("Total quantity is : "+Quantity);
}
void trackSalesStatus(int number) {
sold=sold+number;
}
public String Display() {
return "BOOKSOLD :"+sold+"\nQuantity Available : "+(Quantity-
sold)+"\nbookCategory:"+bookCategory+
"\nTitle :"+Title+"\nPublisher :"+Publisher+
"\nSellingprice :"+sellingprice;
}
}

public class BookStrore {
public static void main(String[]args) {
System.out.println("Category 1 Kids");
Book obj1=new Book("Kids","grammer","Machvial","Wren",1000,56);
obj1.DisplayQuantity();
obj1.trackSalesStatus(6);
obj1.trackSalesStatus(6);
System.out.println(obj1.Display());
System.out.println("Category 2 engineering ");
Book obj2=new Book("Engineering","Electric ","Einstien","Aristote",999,70);
obj2.DisplayQuantity();
obj2.trackSalesStatus(5);
obj2.trackSalesStatus(9);
System.out.println( obj2.Display());
System.out.println("Category 3 Storry");
Book obj21=new Book("Story","twobrothers","Shakespeare","Monto",899,90);
```

```
obj21.DisplayQuantity();  
obj21.trackSalesStatus(7);  
obj21.trackSalesStatus(3);  
System.out.println(obj21.Display());  
}  
}
```

output

```
Category 1 Kids  
Total quantity is : 56  
BOOKSOLD :12  
Quantity Available : 44  
bookCategory:Kids  
Title :Machvial  
Publisher :Wren  
Sellingprice :1000  
Category 2 engineering  
Total quantity is : 70  
BOOKSOLD :26  
Quantity Available : 44  
bookCategory:Engineering  
Title :Einstien  
Publisher :Aristote  
Sellingprice :999  
Category 3 Storry  
Total quantity is : 90  
BOOKSOLD :36  
Quantity Available : 54  
bookCategory:Story  
Title :Shakespare  
Publisher :Monto  
Sellingprice :899|
```