**Java Lab Sheet 1**

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1. Find sum and average of three numbers

public class L1Q1

{

    public static void main(String args[])

    {

        int a=5,b=6,c=7;

        System.out.println("The sum is: "+(a+b+c));

        System.out.println("The average is: "+(float)(a+b+c)/3);

    }

}

Output:



2. Find the biggest of two numbers

import java.util.Scanner;

public class L1Q2

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter 2 numbers: ");

        int a = sc.nextInt();

        int b = sc.nextInt();

        if (a>b)

            System.out.println("The largest is: "+a);

        else

            System.out.println("The largest is: "+b);

    }

}

Output:



3. Find the biggest of three numbers.

import java.util.Scanner;

public class L1Q3

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter 3 numbers: ");

        int a = sc.nextInt();

        int b = sc.nextInt();

        int c = sc.nextInt();

        int d;

        if (a>b && a>c)

            d = a;

        else if (b>c)

            d = b;

        else

            d = c;

        System.out.println("The largest is: "+d);

    }

}

Output:



4. Find the area and perimeter of the rectangle

import java.util.Scanner;

public class L1Q4

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the height of the rectangle: ");

        int h = sc.nextInt();

        System.out.print("Enter the width of the rectangle: ");

        int w = sc.nextInt();

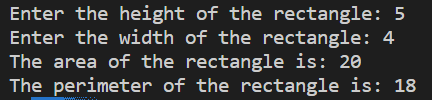
        System.out.println("The area of the rectangle is: "+(h\*w));

        System.out.println("The perimeter of the rectangle is: "+2\*(h+w));

    }

}

Output:



5. Find the second largest among 3 numbers

import java.util.Scanner;

public class L1Q5

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter 3 numbers: ");

        int a = sc.nextInt();

        int b = sc.nextInt();

        int c = sc.nextInt();

        int second;

        if (a>b && a>c)

        {

            if (b>c)

                second = b;

            else

                second = c;

        }

        else if (b>c)

        {

            if (a>c)

                second = a;

            else

                second = c;

        }

        else

        {

            if (b>a)

                second = b;

            else

                second = a;

        }

        System.out.println("The second largest is: "+second);

    }

}

Output:



6. Check whether the given number is a multiple of 6 or not.

import java.util.Scanner;

public class L1Q6

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter a number: ");

        int n = sc.nextInt();

        if (n%6==0)

            System.out.println("The number is divisible by 6");

        else

            System.out.println("The number is not divisible by 6");

    }

}

Output:



7. Display all even numbers below a limit by using for loop.

import java.util.Scanner;

public class L1Q7

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter a number: ");

        int n = sc.nextInt();

        for (int i=0;i<=n;i+=2)

            System.out.print(i+" ");

        System.out.print("\n");

    }

}

Output:



8. Display all odd numbers below a limit using while loop.

import java.util.Scanner;

public class L1Q8

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter a number: ");

        int n = sc.nextInt();

        int i = 1;

        while (i<=n)

        {

            System.out.print(i+" ");

            i+=2;

        }

        System.out.print("\n");

    }

}

Output:



9. To accept an amount in rupees and to calcaulte and display the number of currency notes for each denomination 500, 200, 100, 50, 20, 10, 5, 2, 1 such that the total number of notes will be at minimum. Also output the total number of currency notes.

import java.util.Scanner;

public class L1Q9

{

    public static void main(String args[])

    {

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter an amount: ");

        int n = sc.nextInt();

        int denoms[] = {500,200,100,50,20,10,5,2,1};

        int denums[] = new int[denoms.length];

        for (int i=0;i<denoms.length;i++)

        {

            denums[i]=0;

            if (n>=denoms[i])

            {

                denums[i] = n/denoms[i];

                n = n%denoms[i];

            }

        }

        System.out.println("\nDenoms\t:Count");

        for (int i=0;i<denoms.length;i++)

            System.out.println(denoms[i]+"\t:"+denums[i]);

        int sum=0;

        for (int i=0;i<denums.length;i++)

            sum+=denums[i];

        System.out.println("\nThe number of currency notes is: "+sum);

    }

}

Output:

