

NAME: GAUSWAMI GAZAL PARESHGIRI CLASS: SYBCA/5 ROLL:541 SUBJECT:JAVA TOPIC: PRACTICAL ASSIGNMENT OF JAVA
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```
1)
//sum of two number
import java.util.Scanner;

class Sum1{
    public static void main(String args[]){
        int a,b,sum;
        Scanner sc = new Scanner(System.in);

        //take user input
        System.out.println("Enter First Number: ");
        a = sc.nextInt();

        //take user input
        System.out.println("Enter Second Number: ");
        b= sc.nextInt();

        sum=a+b;

        System.out.println("Sum : "+sum);
    }
}
```

Output:

```
Enter First Number:
5
Enter Second Number:
10
Sum : 15
```

```
2)
//Odd Even number in java
import java.util.Scanner;

class OddEven{
    public static void main(String args[]){

        Scanner sc  = new Scanner(System.in);
```

```

        System.out.println("Enter Number: ");
        int n = sc.nextInt();

        if (n%2==0)
        {
            //print 1 if number is even
            System.out.println("1");
        }
        else
        {
            //print 0 if number is odd
            System.out.println("0");}

    }
}

```

Output:

```

Enter Number:
5
0

```

```

Enter Number:
4
1

```

```
import java.util.Scanner;
```

3)

// Write a programme to do plus , multyply , division and subtraction

```

class ArithmeticChoice{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter 1.Addition 2.Subsraction
3.Multiply 4.Division 5.Remainder ");
        int n = sc.nextInt();

        switch(n){
            //case for adddition
            case 1:

```

```

        System.out.println("Enter First Number:
");
        int f = sc.nextInt();
        System.out.println("Enter Second Number:
");
        int s = sc.nextInt();
        int Sum = f+s;
        System.out.println("Addition : "+Sum);
        break;
// case for subsstraction
case 2:
        System.out.println("Enter First Number:
");
        f = sc.nextInt();
        System.out.println("Enter Second Number:
");
        s = sc.nextInt();
        int sub = f-s;
        System.out.println("Substraction: "+sub);
        break;
//case for multiplication
case 3:
        System.out.println("Enter First Number:
");
        f = sc.nextInt();
        System.out.println("Enter Second Number:
");
        s = sc.nextInt();
        int mul=f*s;
        System.out.println("Multiplication:
"+mul);
        break;
//case for division
case 4:
        System.out.println("Enter First Number:
");
        f = sc.nextInt();
        System.out.println("Enter Second Number:
");
        s = sc.nextInt();
        int div = f/s;
        System.out.println("Division: "+div);

```

```

        break;
//case for reminder
case 5:
    System.out.println("Enter First Number:
");
    f = sc.nextInt();
    System.out.println("Enter Second Number:
");
    s = sc.nextInt();
    int rem= f%s;
    System.out.println("Reminder: "+rem);
    break;
default:
    System.out.println("You Have Wrong
Choice");
    }
}
}

```

Output:

```

Enter 1.Addition 2.Subsraction 3.Multiply 4.Division 5.Remainder
1
Enter First Number:
15
Enter Second Number:
10
Addition : 25

```

```

Enter 1.Addition 2.Subsraction 3.Multiply 4.Division 5.Remainder
2
Enter First Number:
50
Enter Second Number:
25
Subsraction: 25

```

Enter 1.Addition 2.Subsraction 3.Multiply 4.Division 5.Remainder

3

Enter First Number:

15

Enter Second Number:

4

Multiplication: 60

—

Enter 1.Addition 2.Subsraction 3.Multiply 4.Division 5.Remainder

4

Enter First Number:

30

Enter Second Number:

2

Division: 15

Enter 1.Addition 2.Subsraction 3.Multiply 4.Division 5.Remainder

8

You Have Wrong Choice

4)

//Do some of each singale integer of whole number

//eg. input: 25 output=7

```
import java.util.Scanner;
class SumOfInt{
    public static void main (String[] args){
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter number: ");
        int n = sc.nextInt();

        int digist , sum = 0;

        while(n>0){
            digist= n%10;
            sum= sum+digist;
            n=n/10;
        }
        //print sum
        System.out.println("The Sum is: "+sum);
    }
}
```

Output:

```
Enter number:
25
The Sum is: 7
-----
```

5)

//Write a programe to reversr a String

```
import java.util.Scanner;
import java.io.*;

// Java program to reverse a
// string
public class StrRev
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter String: ");
        var str = sc.nextLine();

        String s[] =str.split(" ");

        String ans = "";
        for (int i = s.length - 1; i >= 0; i--)
        {
            ans += s[i] + " ";
        }
        System.out.println("Reversed String:");
        System.out.println(ans.substring(0,
            ans.length() - 1));
    }
}
```

Output:

```
Enter String:
My Name is Gazal
Reversed String:
Gazal is Name My
-----
```

6)

//write a java programe to count letters.spaces,numbers and other special character of an input String

```
import java.util.Scanner;

class CountStr{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter The String: ");
        var str = sc.nextLine();

        char[] ch = str.toCharArray();
        int letters = 0;
        int spaces = 0 ;
        int number = 0;
        int other = 0;

        for(int i=0;i<str.length();i++){
            //count letters
            if(Character.isLetter(ch[i]))
                letters++;

            //count numbers
            else if(Character.isDigit(ch[i]))
                number++;

            //count spaces
            else if (Character.isSpaceChar(ch[i]))
                spaces++;

            //count others
            else
                other++;
        }
        System.out.println("Input: "+str);
        System.out.println("Letters: "+letters);
        System.out.println("Spaces: "+spaces);
        System.out.println("Number: "+number);
        System.out.println("Other: "+other);
    }
}
```

} Output:

```
Enter The String:
gzlgauswami07@gmail.com
Input: gzlgauswami07@gmail.com
Letters: 19
Spaces: 0
Number: 2
Other: 2
```

7)

//write a java programme to print ascii value of given character

```
import java.util.Scanner;
```

```
class AsciiChar{
    public static void main(String args[]){

        Scanner sc = new Scanner(System.in);

        //Enter Character
        System.out.println("Enter Character: ");
        char ch = sc.next().charAt(0);

        int ascii = ch;
        //You can also cast char to int
        int castAscii = (int) ch;

        System.out.println("The Ascii value of "+ch+" is : "+ascii);
        System.out.println("The Ascii value of "+ch+" is : "+castAscii);

    }
}
```

Output:

```
Enter Character:
g
The Ascii value of g is : 103
The Ascii value of g is : 103
```

8)

//write a java programme to display System Time.



```

import java.time.LocalDateTime;
import java.time.format.DateTimeFormatter;

class SystemTime{
    public static void main(String args[]){

        DateTimeFormatter dtf =
DateTimeFormatter.ofPattern("yyyy/MM//dd HH:mm:ss");
        LocalDateTime now = LocalDateTime.now();

        //print date and time
        System.out.println(dtf.format(now));
    }
} Output:

```

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9)  
//write a java programme to print the odd numbers from 1  
to 9 . Prints one number per line.

```

class OddNUmber{
    public static void main(String[] args){
        int number=10;

        System.out.println("List of Odd number from 1 to
"+ number+" : ");

        for(int i=1;i<=number;i++){
            if(i%2!=0){
                System.out.print(i+" ");
            }
        }
    }
}

```

Output:

List of Odd number from 1 to 10 :  
1 3 5 7 9

10)

//write a java programme to Capitalized each word of String

```
class StringFormatter {

public static String capitalizeWord(String str){
    String words[]=str.split("\\s");
    String capitalizeWord="";
    for(String w:words){
        String first=w.substring(0,1);
        String afterfirst=w.substring(1);
        capitalizeWord+=first.toUpperCase()+afterfirst+"
";
    }
    return capitalizeWord.trim();
}
}

public class CapitalWords {
public static void main(String[] args) {
    System.out.println(StringFormatter.capitalizeWord("my
name is khan"));
    System.out.println(StringFormatter.capitalizeWord("I
am sonoo jaiswal"));
}
}
```

Output:

```
My Name Is Khan
I Am Sonoo Jaiswal
```

11)

// write a java programme to reverse a word

```
import java.util.Scanner;
import java.io.*;

class RevWord{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
```

```

        System.out.println("Enter String: ");
        var str = sc.nextLine();
        char ch;
        String nstr=" ";

        System.out.println("Input: "+str);

        for(int i=0;i<str.length();i++){
            ch=str.charAt(i);
            nstr=ch+nstr;
        }
        System.out.println("Output: "+nstr);
    }
}

```

Output:

```

C:\Program Files\Java\jdk-1.8.0_101\bin>
Enter String:
Gazal
Input: Gazal
Output: lazaG

```

12)

//write a java programme to find large number between first to last element of array

```

import java.util.Scanner;

public class LargeArray{
    public static int getLargest(int[] a, int total){
        int temp;
        //loop
        for (int i = 0; i < total; i++)
        {
            for (int j = i + 1; j < total; j++)
            {
                if (a[i] > a[j])
                {
                    temp = a[i];
                    a[i] = a[j];
                    a[j] = temp;
                }
            }
        }
    }
}

```

```

        }
    }
}
return a[total-1];
}
public static void main(String args[]){
Scanner sc = new Scanner(System.in);

int a[] = new int[3];

//Take user input element of array
System.out.println("Enter element: ");

for(int i=0;i<3;i++){
    a[i]= sc.nextInt();
}

System.out.println("Largest : "+getLargest(a,3));
}}
```

Output:

```

, ,
Enter element:
20
80
50
Largest : 80

```

13)

//Sort Array in Java

```

import java.util.Arrays;
import java.util.Scanner;

class ArraySort {
    public static void main(String args[])
    {
        // int[] arr = { 5, -2, 23, 7, 87, -42, 509 };
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter number of element : ");
        int n = sc.nextInt();
    }
}
```

```

int arr[] = new int[n];
System.out.println("Enter Elenemt: ");
for(int i=0;i<n;i++){
    arr[i]= sc.nextInt();
}

System.out.println("The original array is: ");
for (int num : arr) {
    System.out.print(num + " ");
}
Arrays.sort(arr);
System.out.println("\nThe sorted array is: ");
for (int num : arr) {
    System.out.print(num + " ");
}
}
} Output:

```

```

Enter number of element :
3
Enter Elenemt:
10
50
30
The original array is:
10 50 30
The sorted array is:
10 30 50

```

14)

```

//add two number using function overloading
import java.util.Scanner;

class Adder{
    //add programme of two number
    static int add(int a,int b){return a+b;}
    //add programme of three number
    static int add(int a,int b,int c){return a+b+c;}
}

```

```

class SumOverLoading    {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter First Number: ");
        int a = sc.nextInt();
        System.out.println("Enter First Number: ");
        int b = sc.nextInt();
        System.out.println("Enter First Number: ");
        int c = sc.nextInt();

        //call add function
        System.out.println("Sum Of Two
Number:  "+Adder.add(a,b));
        System.out.println("Sum Of Three
Number:  "+Adder.add(a,b,c));
    }
} Output:

```

```

Enter First Number:
10
Enter Second Number:
15
Enter Third  Number:
20
Sum Of Two Number:  25
Sum Of Three Number:  45

```

15)

//take user input of empolyee details and show in proper formate

```
import java.util.Scanner;
```

```

class Employee {
    int id;
    String name;
    float sal;

}

```

```

class EmpDetail {
    public static void main(String args[]) {

```

```

Scanner sc = new Scanner(System.in);
System.out.print("Enter How many employee:");
int k = sc.nextInt();

Employee emp[] = new Employee[k];

for (int i = 0; i < k; i++) {
    emp[i] = new Employee();

    System.out.println("Enter " + (i + 1) + "
Employee data :");

    System.out.print("Enter employee id :");
    emp[i].id = sc.nextInt();
    System.out.print("Enter employee name :");
    emp[i].name = sc.next();
    System.out.print("Enter employee salary :");
    emp[i].sal = sc.nextFloat();

}

System.out.println("\n\n===== All employee
details are :=====\n");

for (int i = 0; i < k; i++) {
    System.out.println("Employee id :" + emp[i].id
+ " || Employee Name: " + emp[i].name + " || Employee
Salary: " + emp[i].sal);

}
}

```

} Output:

```
Enter How many employee:3
Enter 1 Employee data :
Enter employee id :111
Enter employee name :Gazal
Enter employee salary :50000
Enter 2 Employee data :
Enter employee id :222
Enter employee name :Pawan
Enter employee salary :10000
Enter 3 Employee data :
Enter employee id :333
Enter employee name :Meera
Enter employee salary :30000
```

```
===== All employee details are :=====
```

```
Employee id :111 || Employee Name:  Gazal || Employee Salary:  50000.0
Employee id :222 || Employee Name:  Pawan || Employee Salary:  10000.0
Employee id :333 || Employee Name:  Meera || Employee Salary:  30000.0
```

16)

//Find Area of tringale and rectangle using class

//Rectanglae area logic

class Rectangle

```
{
    public double Compute(double l, double b)
    {
        return (l*b);
    }
}
```

//tringale area logic

class Triangle

```
{
    public double Compute(double b, double h)
    {
        return (b*h/2);
    }
}
```

//implement both logic area

public class RecTringArea

```
{
```



```

public static void main(String args[])
{
    Rectangle rect = new Rectangle();
    double RArea = rect.Compute(10, 20);
    System.out.println("The area of the Rectangle is
"+RArea);

    Triangle tri = new Triangle();
    double TArea = tri.Compute(10, 20);
    System.out.println("The area of the triangle is
"+TArea);

}
} Output:

```

```

The area of the Rectangle is 200.0
The area of the triangle is 100.0

```

17)

//Write a programme to which design bank account class a saving and currant class account and manage information accordingly

```
import java.util.Scanner;
```

```

class SavingAccount{
    void withdraw(int x){
        if(x>20000){
            System.out.println("You Are Not Withdraw more
money now You Rich The Limit");
        }
        else{
            System.out.println("You Can Withdraw Money");
        }
    }
    void deposit(int y){
        if(y<5000){
            System.out.println("Please Creadit Mimimum 5000/-
Balance");
        }
        else{

```

```

        System.out.println("You Have Enough Bank Blance");
    }
}
}
class CurrantAccount{
    void withdraw(int x){
        if(x>40000){
            System.out.println("You Are Not Withdraw more
money now You Rich The Limit");
        }
        else{
            System.out.println("You Can Withdraw Money");
        }
    }
    void deposit(int y){
        if(y<5000){
            System.out.println("You Can Get 5% rate ");
        }
        else{
            System.out.println("You Can Get 15% rate");
        }
    }
}
}
class BankAccounts{
    public static void main(String[] args){
        int acno,deposite,withdraw;
        String name,branch,type;

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter Your Account Number Two Last
Number: ");
        acno = sc.nextInt();

        System.out.println("Enter Your Deposit Amount: ");
        deposite = sc.nextInt();

        System.out.println("Enter Your Branch Name: ");
        branch = sc.nextLine();

        System.out.println("Enter C for currant account and S
for saving account: ");
    }
}

```

```

type = sc.nextLine();

System.out.println("Enter Your Withdraw Amount: ");
withdraw = sc.nextInt();

SavingAccount s1 = new SavingAccount();
CurrantAccount c1 = new CurrantAccount();

System.out.println("Account: "+acno);
System.out.println("Branch: "+branch);
System.out.println("Deposit: "+deposit);
System.out.println("Withdraw: "+withdraw);

if(type=="C"){
    c1.withdraw(withdraw);
    c1.deposit(deposit);
}
else{
    s1.withdraw(withdraw);
    s1.deposit(deposit);
}

}

```

} Output:

```

Enter Your Account Number Two Last Number:
65
Enter Your Deposit Amount:
25555
Enter Your Branch Name:
Enter C for currant account and S for saving account:
S
Enter Your Withdraw Amount:
5000
Account: 65
Branch:
Deposit: 25555
Withdraw: 5000
You Can Withdraw Money
You Have Enough Bank Blance _

```

18)

//write a java programme to which design class name fan to represent fan properties according to this properties fan operation will be perform

```
class Fan
{
    public static final int SLOW=1,MEDIUM=2,FAST=3;
    int speed;
    boolean f_on;
    double radius;
    String color;

    Fan()
    {
        speed=SLOW;
        f_on=false;
        radius=4;
        color="blue";
    }

    Fan(int speed,double radius,String color,boolean f_on)
    {
        this.speed=speed;
        this.radius=radius;
        this.color=color;
        this.f_on=f_on;
    }

    void display()
    {
        if(f_on==true)
        {
            System.out.println("Fan is on \n the speed is
            =" +speed+"\n the color is =" +color+"\n the radius is
            =" +radius);
        }
        else
        {
            System.out.println("Fan is off \n the color of fan is
            =" +color+"\n the radius of fan is =" +radius);
        }
    }
}
```

```
public static void main(String [] args)
{
    Fan obj = new Fan();
    Fan obj1 = new Fan(MEDIUM,6,"brown",true);
    obj.display();
    obj1.display();

}
} Output:
```

```
the color of fan is =blue
the radius of fan is =4.0
Fan is on
the speed is =2
the color is =brown
the radius is =6.0
```