**Assignment-1**

1)

**import** java.util.Scanner;

**public** **class** armstrong {

**public** **static** **void** main(String[] args) {

Scanner s=**new** Scanner(System.***in***);

System.***out***.println("enter a number to check ArmStrong Or Not:");

**int** a=s.nextInt();

**int** sum=0;

**int** temp;

**int** number=a;

**while** (a!=0) {

temp=a%10;

sum=sum+(temp\*temp\*temp);

a=a/10;

}

**if** (sum==number) {

System.***out***.println(number+" is ArmStrong Number ");

}

**else** {

System.***out***.println(number + "is not ArmStrong Number ");

}

}

}

2)

**public** **class** ArmStrong {

**public** **static** **void** main(String[] args) {

**int** sum = 0;

**int** temp;

**int** number;

System.***out***.println("arm strong number bw 100-999 are :");

**for** (**int** i = 100; i <= 999; i++) {

number = i;

**while** (number > 0) {

temp = number % 10;

sum = sum + (temp \* temp \* temp);

number = number / 10;

}

**if** (sum == i) {

System.***out***.println(i+ " is ArmStrong Number ");

}

sum=0;

}

}

}

3)

**import** java.util .\*;

**public** **class** SimpleAndCompoundInterest {

**public** **static** **void** main (String argu[ ])

{

**double** amount, rate, t, simpleInterest,compoundInterest;

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

System.***out***.println("Enter the amount:");

amount=sc.nextDouble();

System. ***out***. println("Enter the No.of months:");

t=sc.nextDouble();

System. ***out***. println("Enter the Rate of interest");

rate=sc.nextDouble();

simpleInterest=(amount \* t \* rate/100);

compoundInterest=amount \* Math.*pow*(1.0+rate/100.0,t) - amount;

System.***out***.println("Simple Interest="+simpleInterest);

System.***out***. println("Compound Interest="+compoundInterest);

}

}

4)

**import** java.util.Scanner;

**public** **class** Results {

**public** **static** **void** main(String[] args) {

Scanner s=**new** Scanner(System.***in***);

System.***out***.println("Enter First Subject-1 Marks");

**int** subject1=s.nextInt();

System.***out***.println("Enter First Subject-2 Marks");

**int** subject2=s.nextInt();

System.***out***.println("Enter First Subject-3 Marks");

**int** subject3=s.nextInt();

**if** (subject1>=60&&subject2>=60&&subject3>=60) {

System.***out***.println("Passed");

}

**else** **if** (((subject1>=60&&subject2>=60)) || ((subject2>=60&&subject3>=60 )) || ((subject3>=60&&subject1>=60 ))) {

System.***out***.println("Promoted");

}

**else** **if**(subject1>60|| subject2 >60|| subject3>60 || (subject1<60&&subject2<60&&subject3<60)) {

System.***out***.println("Failed");

}

**else**

{

System.***out***.println("entered data is invalid");

}

}

}

5)

**import** java.util.Scanner;

**public** **class** IncomeTaxCalculator {

**public** **static** **void** main(String[] args) {

Scanner s=**new** Scanner(System.***in***);

**double** ctc=s.nextDouble();

**if** (ctc>=0&&ctc<=180000) {

System.***out***.println("tax payable in % is : NILL ");

}

**else** **if**(ctc>180000&&ctc<=300000) {

System.***out***.println(" tax payable in % is : 10 ");

}

**else** **if**(ctc>300000&&ctc<=500000) {

System.***out***.println(" tax payable in % is : 20 ");

}

**else** **if**(ctc>500000&&ctc<=1000000) {

System.***out***.println(" tax payable in % is : 30 ");

}

**else**{

System.***out***.println("tax payable in % is : 40 ");

}

}

}

6)

**import** java.util.\*;

**public** **class** Password {

**public** **static** **void** main(String[] args) {

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

**int** count = 0;

System.***out***.println("Enter the Username");

String uname = sc.nextLine();

System.***out***.println("Enter the Password");

String upass = sc.nextLine();

System.***out***.println(uname + " you are Registered Successfully");

System.***out***.println(" PLEASE ENTER BELOW YOUR LOGIN DETAILS");

System.***out***.println("Enter the Username");

String lname = sc.nextLine();

System.***out***.println("Enter the Password");

String lpass = sc.nextLine();

**while** (count <= 2) {

**if** ((!uname.equals(lname)) || (!upass.equals(lpass))) {

System.***out***.println("WARNING: USERNAME OR PASSWORD MISMATCH");

System.***out***.println("Enter the Username");

lname= sc.nextLine();

System.***out***.println("Enter the Password");

lpass= sc.nextLine();

} **else** {

System.***out***.println("YOU ARE LOGGED IN");

**break**;

}

count++;

}

**if** (count > 2) {

System.***out***.println("PLEASE CONTACT ADMIN");

}

}

}

7)

**public** **class** FindElementInArray {

**public** **static** **void** main(String[] args) {

**int**[] num = {5,12,14,6,78,19,1,23,26,35,37,7,52,86,47};

**int** toFind = 19;

**boolean** found = **false**;

**for** (**int** n : num) {

**if** (n == toFind) {

found = **true**;

**break**;

}

}

**if**(found)

System.***out***.println(toFind + " is found.");

**else**

System.***out***.println(toFind + " is not found.");

}

}

8)

**public** **class** Array {

**static** **void** bubbleSort(**int**[] arr) {

**int** n = arr.length;

**int** temp = 0;

**for** (**int** i = 0; i < n; i++) {

**for** (**int** j = 1; j < (n - i); j++) {

**if** (arr[j - 1] > arr[j]) {

temp = arr[j - 1];

arr[j - 1] = arr[j];

arr[j] = temp;

}

}

}

}

**public** **static** **void** main(String[] args) {

**int** arr[] = {5, 12, 14, 6, 78, 19, 1, 23, 26, 35, 37, 7, 52, 86, 47};

System.***out***.println("Array Before Bubble Sort");

**for** (**int** i = 0; i < arr.length; i++) {

System.***out***.print(arr[i] + " ");

}

System.***out***.println();

*bubbleSort*(arr);

System.***out***.println("Array After Bubble Sort");

**for** (**int** i = 0; i < arr.length; i++) {

System.***out***.print(arr[i] + " ");

}

}

}