Assignment-5 192311006

R. Mathan

4) Prime and composite numbers.

```
import java.util.scanner;
Public class main{
    Public static void main(String.arg
int[] arr={4,54,29,71,7,59,98,23};
int com=0,prL=0;
For(int num;arr){
    int count=0;
for(int i=1;i<=num;i++){
    if (num%i==0) count++;
}
 if (count>2) count++;
    else if (count==2)prL++;
}
System.out.print("composite numbers:
                    %.d,com,pri);
}
}.
```

(12) mth maximum num and nth min numbers in array.

```
import java.util.Scanner;
Public class main{
    public static void main (String[] args){
        Int[] arr = {14, 16, 87, 36, 25, 89, 34};
        Array.sort (arr);
        Int m = 1, n = 3;
        Int max = arr [arr.length - m];
        Int min = arr [n-1];
        System.out.println (m, max, n, min, max + min, max - min)
    }
}
```

(13) Write a program to print total amount available in ATM machine.

```
public class ATM {
    public static void main (String args[]){
        Int [] denomination = {500, 100, 200, 2000};
        Int [] quantities = {4, 20, 32, 1};
        Int totalBal = 0;
        for (Int i=0; i<denomination.len; i++){
            totalbal += denomination[i] * quantities [i];
        }
        system.out.println (" total balance: " + total bal);
    }
}
```

(44) write a program to find the sum of digits of n digit.

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```
import java.util.Scanner;
Public class {
    Public static main void (String args[]){
Scanner input =new scanner (System.in);
Int n = input.nextInt();
int sum =0;
while (n!=0) {
    Int rem = n%.10;
    Sum = sum+rem;
    n=n/10;
}
System.out.println(sum);
}
}
```

(ans) write a program to find the square root of a perfect square number.

```
import java.util.scanner;
class main{
    public static void main (String args[]){
Scanner input = new Scanner (System.in);
double n = input.nextInt();
double sqrt = math.sqrt(n);
System.out.println ("sqrt" + "=" + sqrt);
}
```

3) write a program for print inverted pyramid pattern.

```
import java.util.Scanner;
class main{
    public static void main (String args[]){
Scanner input = new Scanner (System.in);
int n = input.nextInt();
for (int i = n; i >= 1; i--){
for (int j = 0; j < n-i; j++){
    System.out.print(" ");}
for (int k = 1; k <= i; k++){
    System.out.print("*");}
```

(47) write program for matrix multiplication.

```
import java.util.Scanner;
class main {
    public static void main (String [] args){
Scanner Input = new Scanner (System.in);
Int r = Input.nextInt();
Int c = Input.nextInt();
Int mat1 [][] = new int [r][c];
Int mat2 [][] = new Int [r][c];
for (Int i=0 ; i<r ; i++) {
    for (Int j=0 ; j<c; j++){
    mat1[i][j] = Input.nextInt();
    }
}
for (int i=0 ; i<r ; i++){
    for (Int j=0 ; j<c ; j++) {
        mat2 [i][j] = Intut.nextInt();
    }
}
int sum [][] = new Int [r][c];
for (Int i=0 ; i<r; i++) {
    for (Int j=0; j<c; j++){
        sum[i][j] = 0;
    for (int k=0; k<c; k++) {
```

```
sum[i][j] = sum[i][j] + mat1[i][k] * mat2[k][j];
}
System.out.println(sum[i][j] + "\t");
}
```

9.

(18) write a program using choice to check

```
import java.util.Scanner;
class main {
public static void main(String args[]){
Scanner input = new Scanner(System.in);
String s1 = s1.length();
for (int i = len-1; i >= 0; i--)
{
s2 = s2 + s1.charAt(i);
}
if (s1.equals(s2)) {
System.out.println("palindrome");
}
else {
System.out.println("not a palindrome");
}
```

(19) Write a program to convert Decimal numbers equivalent to Binary numbers and octal numbers?

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```
import java.util.Scanner;
class main {
    public static void main (String args[]) {
Scanner Input = new Scanner (System.in);
int dec = 15;
String bin = Integer.toBinaryString (dec);
String oct = Integer.toOctalString (dec);
System.out.println ("Binary numbes:" + bin);
System.out.println ("Octal numbes:" + oct);
    }
}
```

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```
import java.util.Scanner;
class main{
    public static void main (String args[]){
Scanner Input =new Scanner (System.in);
int a, b;
double bonus =0;
System.out.Println ("Enter the grade:");
char a = input.next().charAt(0);
System.out.println (" Enter the salary:");
int b = input.nextInt();
if (a1 == 'A')
{
    bonus = b1 * (0.05);
    if (b1 < 10000) {
        bonus = bonus + b1 * (0.02);
    }
System.out.println (" salary = "+b1);
System.out.println (" bonus = "+bonus);
System.out.println (" total to be Paid");
}
}
```