Assignment 3

1 Prime & composite numbers?

```
Import java.util.Scanner;
Public class main{
    Public static void main(String [] args){
  Scanner input= new Scanner (System.out);
int arr[]= {1, 3, 5, 7, 11};
int com = 0, Pri=0;
for(int i=0; i<arr.length; i++){
      int c=0;
for(int j=1; j<=arr[i]; j++){
    if (arr[i] % j ==0){
          c++;

   }
  }
if(c < 2)
{
com++;
}else if (c==2){
    Pri++;
}}
System.out.println("Composite number: "+ com);
System.out.println("prime number: "+ Pri);
}
}
```

2 Mth & Nth maximum & minimum number

```
import java.util.Scanner;
Public class Main{
   Public static void main (String [] args){

int Arr [] = {1, 3, 5, 7, 11};

   int m = 1 , n = 3;

   int max = arr[arr.length - m];

   int min = arr[n-1];

System.out.println("Maximum number: " + max);
System.out.println(n+"Minimum numb: " + min);
System.out.println("sum:"+sum);
System.out.println("diff:" + diff);
}
}
```

3. Print total amount in a ATM machine;

```
import java.util.Scanner;
Public class main {
  Public static void main (String [] args ){

Scanner input = new Scanner (System.in);

int n1 = 500;
int d1 = 4;
```

```
int n2 = 100;
int d2 = 20;

int n3 = 200;
int d3 = 32;

int n4 = 2000;
int d4 = 1;

System.out.Println ("Total Avaliable Balance:
                        " + total Avg Balance);

}
}
```

4. Palindrom or not

```
import java.util.Scanner;
Public class main{
    Public Static void main (String [] args){
        Scanner input = new Scanner(System.in);
System.out.println ("Enter the String: ");
        String n = input.nextline();

    String reversed = new String Builder (input).
                        reverse().toString();
    System.out.println (input + "is not a Palindrome");

  }
 }
}
```

Binary & octal

```
import java.util.Scanner;
Public class Main{
  Public static void main(String[] args){
  Scanner input = new Scanner(System.in);
System.out.println("Enter the number: ");
      int decimal = input.nextInt();

String binary = Integer.toBinaryString(
String octal = Integer.toOctalString(
System.out.println("Binary number: "+Binary);
System.out.println("octal number: "+octal);
}
}
```

first nth perfect number

```
import java.util.Scanner;
Public class Main{
Public static void main (String[] args){
Scanner input= new Scanner(System.in){
System.out.println("Enter the number: ");
    int num = input.nextInt();
    int sum=1;
```

```
for (int j=0; j<=n; j++){
    if (i%j == 0){
        sum += j;
    }
}
if (sum == n){
System.out.println(i + " ");
}
}
}
```

e) Marks of four subjects of a school

```
Public class Main{
Public static void main(String[] args)
{
int m1 = 90;
int m2 = 59;
int m3 = 93;
int m4 = 84;
int total = m1 + m2 + m3 + m4;
int avg = total / 4;
```

```
System.out.Println ("Total : "+ total);
System.out.println ("Avg:" +AVG);

if (avg >75){
   System.out.println ("o grade");

}
else if (avg >=60)
{
System.out.println ("A grade");
}
else if (avg >=50){
System.out.println ("B grade");
}
else
{
System.out.print ("Fail");

}
}
}
```

calculate tax:

```
import java.util.Scanner;

Public class main{

Public static void main (String[] args){
Scanner input = new Scanner (system.in);
System.out.println ("Enter your income:");

int income = input.nextint;
float tax;

if (income <= 150000){
system.out.println ("No tax");

}
else{
tax = math.max (0, (math.min(income, ~~300000~~
300000- 150000) * 0.10f);

+ math.max (0, Math.min (income, 500000)-300000)
* 0.20F);
```

```
+ Math.max(0, (income - 50000) * 0.30F);

    System.out.println("Tax = " + Taxe);

  }
}
}
```