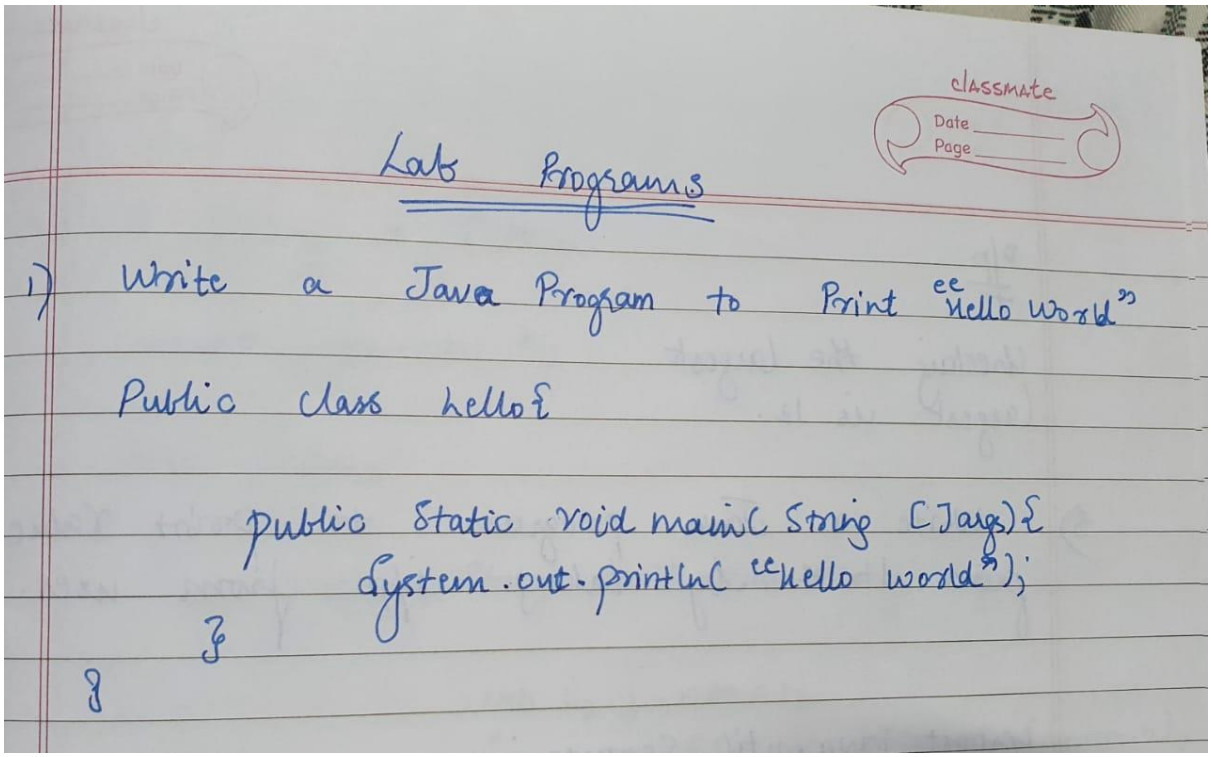
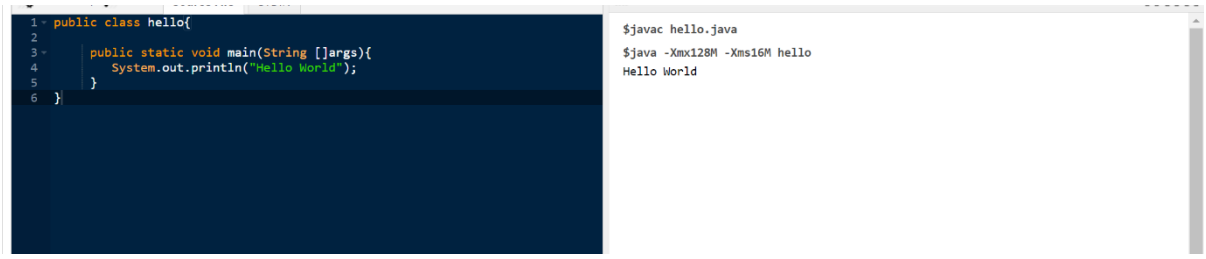
//Hello World program





2). write a Java Program to find largest of 3 nos using if

```
Public class Large {
    public static void main (String [] args) {
    int a = 10 , b = 3 , c = 12;
    System.out.println ("Checking the largest");
      if (a>b && a>c)
    {
        System.out.println ("largest is "+a);
    }
    else if (b>a && b>c)
    {
        System.out.println ("largest is "+b);
    }
    else if (c>a && c>b)
    {
        System.out.println ("largest is "+c);
    }
}
```

```java
public class hello{

    public static void main(String []args){
        int a=10 , b=3 , c=12;
        System.out.println("Checking the largest");
        if(a>b && a>c)
        {
            System.out.println("largest is "+a);
        }
        else if(b>a && b>c)
        {
            System.out.println("largest is "+b);
        }
        else if(c>a && c>b)
        {
            System.out.println("largest is "+c);
        }
    }
}
```

```
$javac hello.java
$java -Xmx128M -Xms16M hello
Checking the largest
largest is 12
```

3) Write a Java program to print value from 1 to n by taking i/p from user.

```
import java.util.Scanner;

public class PrintN
{
    public static void main (String[] args)
    {
        int i=1;
        Scanner sc = new Scanner (System.in);
System.out.print("Enter n:"); int n = sc.nextInt();
        System.out.println("Numbers are:");
        while(i<=n)
        {
            System.out.println(i);
            i++;
        }
    }
}
```

o/p

```
Enter n: 3
1
2
3
```

```java
import java.util.*;

class PrintN
{
        public static void main(String[] args)
        {
                int i =1;
                Scanner Sc = new Scanner(System.in);
                System.out.print("Enter the value n : ");
                int n = Sc.nextInt();
                System.out.println("Numbers are : ");
                while(i<=n)
                {
                        System.out.println(i);
                        i++;
                }
        }
}
```

```
C:\Users\Samarth\Documents\lab programs>javac PrintN.java

C:\Users\Samarth\Documents\lab programs>java PrintN
Enter the value n : 5
Numbers are :
1
2
3
4
5

C:\Users\Samarth\Documents\lab programs>
```

4). // Printing a Pattern

```
import java.util.*;

class Pattern
{
    public static void main(String args[])
    {
        int i, j, num = 1;
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the number of rows:");
        int n = sc.nextInt();
        for(i=1;i<=n;i++)
        {
            for(j=1;j<=i;j++)
            {
                System.out.println(num+"\t");
                num++;
            }
            System.out.println("\n");
        }
    }
}
```

```
import java.util.*;

class Pattern
{
        public static void main(String args[])
        {
                int i, j , num=1;
                Scanner Sc = new Scanner(System.in);
                System.out.print("Enter the number of rows : ");
                int n = Sc.nextInt();
                for(i=1;i<=n;i++)
                {
                    for(j=1;j<=i;j++)
                    {
                        System.out.println(num+"\t");
                        num++;
                    }
                    System.out.println("\n");

                }
        }
}
```

//Program to Accept CIE, SIE marks for Grade

```
import java.util.*;
Class Grade {
    public Static void main (String args[]) {
    Scanner in = new Scanner (System.in);
    int cie, see, total=0;
    Char grade;
    System.out.println("Enter the CIE marks
        .... out of 50)");
    cie = in.nextInt();
    System.out.println("Enter the SIE marks
        .... out of 100)");
    See = in.nextInt();
    total = (cie + (see/2));
    if ( total >=90 && total<=100)
     System.out.println("S Grade");
    else if (total >=80 && total<90)
    System.out.println("A Grade");
    else if (total >=70 && total<80)
    System.out.println("B Grade");
    else if (total >=60 && total<70)
    System.out.println("C Grade");
    else if ( total >=50 && total<60)
    System.out.println("D Grade");
    else if (total >=40 && total<50)
    System.out.println("E Grade");
     else if ( total<40)
     System.out.println("F Grade");
     else
     System.out.println("Invalid");
    }
}
```

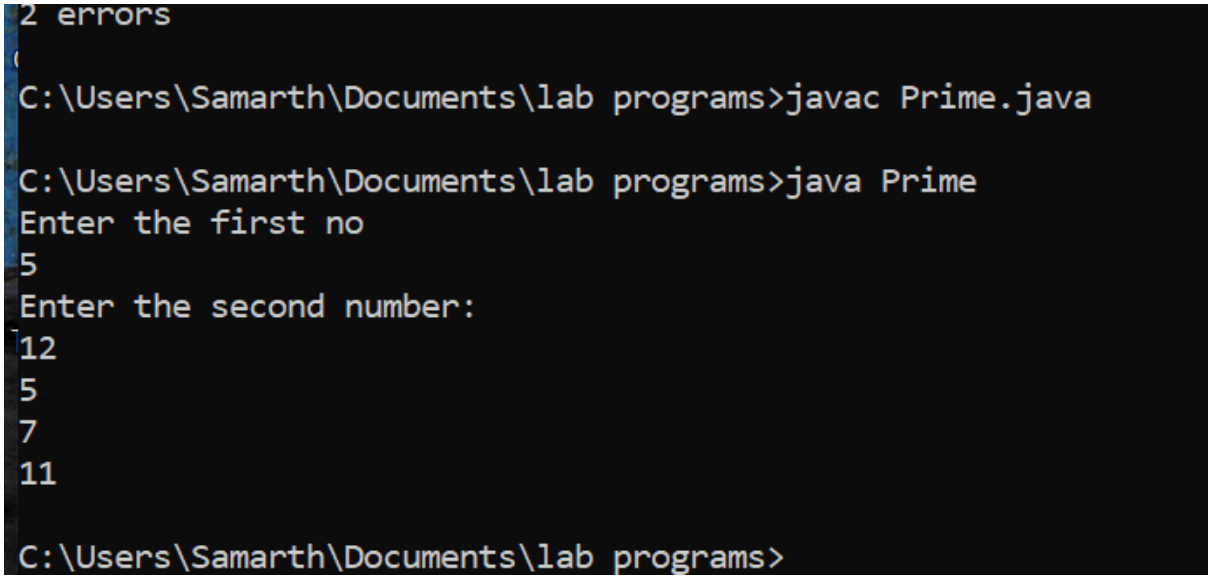
```
import java.util.*;
class Grade {
       public static void main(String args[]) {
       Scanner in = new Scanner(System.in);
       int cie,see,total=0;
       char grade;
       System.out.println("Enter the CIE marks ..Out of 50)");
       cie=in.nextInt();
       System.out.println("Enter the SIE marks ..Out of 100)");
       see=in.nextInt();
       total=(cie+(see/2));
       if(total>=90 && total<=100)
       System.out.println("S Grade");
       else if(total>=80 && total<90)
       System.out.println("A Grade");
       else if(total>=70 && total<80)
       System.out.println("B Grade");
       else if(total>=60 && total<70)
       System.out.println("C Grade");
       else if(total>=50 && total<60)
       System.out.println("D Grade");
       else if(total>=40 && total<50)
       System.out.println("E Grade");
       else if(total<40)
       System.out.println("F Grade");
       else
       System.out.println("Invalid");
      }
}
```

```
C:\Users\Samarth\Documents\lab programs>javac Grade.java

C:\Users\Samarth\Documents\lab programs>java Grade
Ente1 the CIE marks ..Out of 50)
40
Ente1 the SIE marks ..Out of 100)
85
A Grade

C:\Users\Samarth\Documents\lab programs>
```

6) WAP to print all the prime nos b/w 2 integers.

```
import java.util.*;
class Prime{
    public static void main(String args[]){
    Scanner in = new Scanner(System.in);
    int num1, num2;
    boolean flag;
    System.out.println("Enter 1st no");
        num1 = in.nextInt();
    System.out.println("Enter 2nd no");
        num2 = in.nextInt();
    for(int k = num1; k<=num2; k++){
        flag = true;
        if(k<2){
            flag = false;
        }
        else
        {
        for(int i=2; i<k; i++)
        {
            if(k%i==0){
                flag = false;
            }
        }
    }
    if(flag){
        System.out.println(k);
    }
}
}
```

```
import java.util.*;
class Prime {
     public static void main(String[] args) {
     Scanner in=new Scanner(System.in);
     int num1 ,num2;
     boolean flag;
     System.out.println("Enter the first no");
     num1 =in.nextInt();
     System.out.println("Enter the second number:");
     num2=in.nextInt();
     for (int k = num1; k <= num2; k++) {
     flag = true;
     if(k < 2){
          flag = false;
     }
     else {
     for (int i = 2; i < k;i++) {
     if(k%i==0){
          flag = false;
     }
     }
     }
     if(flag){
       System.out.println(k);
     }
     }
     }
     }
```



7TH program …

```
#include <stdio.h>
#include <stdlib.h>

struct student {
   char name[25];
   int option;
};


int n=0,i=0,j,t=0;
char ch='c';
int a=0,b=0,c=0;


struct student s[100];


int main()
```

```
{
   printf("ENTER THE STUDENT DETAILS AND ELECTIVES FOR THE COURSES BELOW\n\n");

    while(ch=='c'){

        printf("Enter the name:\n");
        scanf("%s",s[t].name);
        printf("Enter the corresponding option\n1.JEE\n2.NEET\n3.ADVANCE\n");
        scanf("%d",&s[t].option);
        t++;
        printf("Enter 'c' to continue or press any key to leave\n");
        scanf("%s",&ch);
   }


   printf("the students elected for the diff choices are listed below\n\n\n");


      printf("The students registered for 1.JEE are\n\n");

      for(j=0;j<t;j++){
         if(s[j].option==1){
            printf("%s\n",s[j].name);
         }

      }

      printf("The students registered for 2.NEET are\n\n");

        for(j=0;j<t;j++){
         if(s[j].option==2){
```

```
            printf("%s\n",s[j].name);
        }

    }

    printf("The students registered for 3.ADVANCE are\n\n");

       for(j=0;j<t;j++){
        if(s[j].option==3){
            printf("%s\n",s[j].name);
        }

    }

for(j=0;j<t;j++){
    if(s[j].option==1){
        a++;
    }
    else if(s[j].option==2){
        b++;
    }
    else if(s[j].option==3){
        c++;
    }
}

printf("the total no of students in each Elective are:\n\n");
printf("1.JEE %d\n",a);
printf("2.NEET %d\n",b);
printf("3.ADVANCE %d\n",c);
```

```
if(a>=3&&b>=3&&c>=3){

   printf("The students registered for 1.JEE are\n");

   for(j=0;j<t;j++){
      if(s[j].option==1){
         printf("%s\n",s[j].name);
      }

   }
   printf("The students registered for 2.NEET are\n");

     for(j=0;j<t;j++){
      if(s[j].option==2){
         printf("%s\n",s[j].name);
      }

   }

   printf("The students registered for 3.ADVANCE are\n");

     for(j=0;j<t;j++){
      if(s[j].option==3){
         printf("%s\n",s[j].name);
      }

   }
}


if(a>=3&&b>=3&&c<3){
```

```
    printf("The students elected for the course 3.ADVANCE will not be floated due participants less than 30 so kindly please register ureself to the any of the other two courses\n");

  for(i=0;i<c;i++){
     printf("%s select any of the courses below\n1.JEE\n2.NEET\n",s[i].name);
     scanf("%d",&s[i].option);
  }

  int a1=0,b1=0;
  for(i=0;i<t;i++){

     if(s[i].option==1){

        a1++;
     }
     else if(s[i].option==2){
        b1++;
     }
  }

 printf("the total no of students in each Elective are:\n");
 printf("1.JEE %d\n",a1);
 printf("2.NEET %d\n",b1);

 printf("Name of the students in each Elective are as follows:\n\n");
 printf("students elected JEE are :\n");
 for(i=0;i<a1;i++){
    printf("%s\n",s[i].name);
 }
```

```
printf("students elected NEET are :\n");
for(i=0;i<b1;i++){
   printf("%s\n",s[i].name);
}



}

 if(a>=3&&b<3&&c>=3){
   printf("The students elected for the course 2.NEET will not be floated due participants less than 30 so kindly please register ureself to the any of the other two courses\n\n");

  for(i=0;i<b;i++){
     printf("%s select any of the courses below\n1.JEE\n3.ADVANCE\n",s[i].name);
     scanf("%d",&s[i].option);
  }



  int a2=0,c2=0;
  for(i=0;i<t;i++){

     if(s[i].option==1){

        a2++;
     }
     else if(s[i].option==3){
        c2++;
     }
  }
```

```
    printf("the total no of students in each Elective are:\n\n");
    printf("1.JEE %d\n",a2);
    printf("2.ADVANCE %d\n",c2);

    printf("Name of the students in each Elective are as follows:\n\n");
    printf("students elected JEE are :\n\n");
    for(i=0;i<a2;i++){
       printf("%s\n",s[i].name);
    }

    printf("students elected ADVANCE are :\n\n");
    for(i=0;i<c2;i++){
       printf("%s\n",s[i].name);
    }

}




     if(a<3&&b>=3&&c>=3){

        printf("The students elected for the course 1.JEE will not be floated due participants less than 30 so kindly please register ureself to the any of the other two courses\n\n");

      for(i=0;i<a;i++){
         printf("%s select any of the courses below\n2.NEET\n3.ADVANCE\n",s[i].name);
         scanf("%d",&s[i].option);
      }

       int b3=0,c3=0;
      for(i=0;i<t;i++){
```

```
        if(s[i].option==2){

           b3++;
        }
        else if(s[i].option==3){
           c3++;
        }
     }

    printf("the total no of students in each Elective are:\n\n");
    printf("1.NEET %d\n",b3);
    printf("2.ADVANCE %d\n",c3);

    printf("Name of the students in each Elective are as follows:\n\n");
    printf("students elected NEET are :\n");
    for(i=0;i<b3;i++){
       printf("%s\n",s[i].name);
    }

    printf("students elected ADVANCE are :\n\n");
    for(i=0;i<c3;i++){
       printf("%s\n",s[i].name);
    }

}


}
```

```
ENTER THE STUDENT DETAILS AND ELECTIVES FOR THE COURSES BELOW

Enter the name:
Samarth
Enter the corresponding option
1.JEE
2.NEET
3.ADVANCE
2
Enter 'c' to continue or press any key to leave
c
Enter the name:
Shivanshu
Enter the corresponding option
1.JEE
2.NEET
3.ADVANCE
1
Enter 'c' to continue or press any key to leave
c
Enter the name:
Subash
Enter the corresponding option
1.JEE
2.NEET
3.ADVANCE
3
```

```
Enter the corresponding option
1.JEE
2.NEET
3.ADVANCE
JEE
Enter 'c' to continue or press any key to leave
the students elected for the diff choices are listed below


The students registered for 1.JEE are

Shivanshu
The students registered for 2.NEET are

Samarth
The students registered for 3.ADVANCE are

Subash
the total no of students in each Elective are:

1.JEE 1
2.NEET 1
3.ADVANCE 1


...Program finished with exit code 0
Press ENTER to exit console.
```