

Programs for OOI Lab-2

1. Java pgm to print "Hello World"
class Main
{
 public static void main (String args [])
 {
 System.out.println ("Hello World");
 }
}

2. import java.util Scanner;
public class Main
{
 public static void main (String[] args)
 {
 int a, b, c;
 Scanner sc = new Scanner (System.in);
 System.out.println ("Enter the first number :");
 a = sc.nextInt();
 System.out.println ("Enter the second number :");
 b = sc.nextInt();
 System.out.println ("Enter the third number :");
 c = sc.nextInt();
 if (a >= b && a >= c)
 System.out.println (a + " is the largest Number");
 else if (b >= a && b >= c)
 System.out.println (b + " is the largest Number");
 else
 System.out.println (c + " is the largest Number");
 }
}

3.

```

import java.util.Scanner;
public class Main
{
    public static void main (String[] args)
    {
        int n; Scanner sc = new Scanner (System.in);
        System.out.print ("Enter the value of n: ");
        n = sc.nextInt();
        System.out.println ("Numbers are: ");
        for (int i = 1; i <= n; i++)
        {
            System.out.println (i);
        }
    }
}

```

6.

```

import java.util.Scanner;
class Main
{
    public static void main (String[] args)
    {
        Scanner sc = new Scanner (System.in);
        int a, b, i, j, count;
        System.out.println ("Enter lower bound of the
        Interval:");
        a = sc.nextInt();
        System.out.println ("Enter Upper bound of the
        Interval:");
        b = sc.nextInt();
        System.out.println ("Prime numbers b/w " + a + " &
        " + b + " are: ");
        for (i = a; i <= b; i++)
        {
            count = 0;

```

```

for (j=1; j<=i; j++)
{
    if (i % j == 0)
    {
        count = count + 1;
    }
    if (count == 2)
    {
        System.out.println(i);
    }
}
}
}

```

④

```

import java.util.*;
class Main
{
    public static void main (String [] args)
    {
        int i, j, n, k = 1;
        System.out.println("Enter the value of n:");
        Scanner sc = new Scanner (System.in);
        n = sc.nextInt();
        for (i=1; i<=n; i++)
        {
            for (j=1; j<=i; j++)
            {
                System.out.print(k++);
                System.out.print("\n");
            }
        }
    }
}

```



```
5. import java.util.*;  
class Main  
{  
    public static void main (String args[])  
    {  
        int total;  
        Scanner in = new Scanner (System.in);  
        System.out.println ("Enter the CIE marks out of  
                                50");  
        int CIE = in.nextInt();  
        System.out.println ("Enter the SEE marks out of  
                                100");  
        int SEE = in.nextInt();  
        total = (CIE + (SEE/2));  
        if (total >= 89)  
        {  
            System.out.println ("You have scored A grade");  
        }  
        else if (total >= 80)  
        {  
            System.out.println ("you have scored B grade");  
        }  
        else if (total >= 60)  
        {  
            System.out.println ("you have scored C grade");  
        }  
        else if (total >= 40)  
        {  
            System.out.println ("you have scored D grade");  
        }  
        else  
        System.out.println ("you have scored E grade");  
    }  
}
```

7)

#include <stdio.h>

#include <string.h>

int iot; int advanced_java;

int advanced_data;

```

typedef struct student { char name[50];
    char course[50]; };
std;

```

```

int main() { char elective1[50] = "Internet of Things";
char elective2[50] = "Advanced Java And J2EEE";
char elective3[50] = "Advanced Data Structures";
printf("Course available are \n It 1: Internet of
Things \n It 2: Advanced Java And J2EEE \n
It 3: Advanced data Structures \n");

```

int n, choice;

printf("Enter the No of Students \n");

scanf("%d", &n);

std s[n];

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

```

{ printf("Enter the Name of Student %d \n", (i+1));
  scanf("%s", s[i].name);

```

fflush(stdin);

printf("Enter the elective of student %d \n", (i+1));

printf("enter your choice \n");

fflush(stdin);

scanf("%d", &choice);

switch (choice)

{ case 1:

strcpy(s[i].course, elective1);

break;

case 2:

strcpy(s[i].course, elective2);

break;

Case 3:

```

strcpy(s[i].course, elective 3);
break; }
fflush(stdin); }
for (int i=0; i<n; i++) {
    if (strcmp(elective 1, s[i].course, strlen
(elective 1))) == 0)
    { printf("Student %s has selected for %s
course \n", s[i].name, s[i].course);
    iot++; }
    if (strcmp(elective 2, s[i].course, strlen(elective 2))
== 0)
    { printf("Student %s has selected for %s
course \n", s[i].name, s[i].course);
    advanced_java++; }
    else
    printf("Student %s has selected for %s course
\n", s[i].name, s[i].course);
    advanced_data++; }
}
printf("***** \n");
printf("No of Students Applied for Internet &
Things is %d \n", iot);
printf("No of Students Applied for Advanced java &
J2EE is %d \n", advanced_java);
printf("No of Student Applied for Advanced
Data Structures is %d \n", advanced_data);
if (iot < 30)
{
    for (int i=0; i<n; i++)
    {
        if (strcmp(s[i].course, elective 1, strlen
(elective 1))) == 0)
    
```

```

printf("%s please select from the other two
courses this course cannot be floated\n", s[i].name);
printf("2: Advanced Java And J2EE \n 3: Advanced
data Structures \n");
printf("Enter your new choice \n");
scanf("%d", &choice);
iot = 0;
Switch(choice)
{
    case 2: strcpy(s[i].course, elective2);
            advanced - java ++;
            break;
    case 3:
            strcpy(s[i].course, elective3);
            advanced - data ++;
            break;
}
} } }
if (advanced - java < 30)
{
    for(int i=0; i<n; i++)
    {
        if (strcmp(s[i].course, elective2, strlen
(elective2)) == 0)
        {
            printf("%s please select from the other 2
courses, this course cannot be floated\n", s[i].name);
            printf("1: Internet of Things \n 3: Advan' data Structures
\n");
            printf("Enter your new choice \n");
            scanf("%d", &choice);
            advanced - java = 0;
            Switch(choice)
            {
                case 1: strcpy(s[i].course, elective1); iot ++;
                        break;

```



```
case 3: strcpy(s[i].course, elective3); advanced_data
    break; ++;
```

```
}
```

```
}} }
```

```
if (advanced_data < 30)
```

```
{
```

```
for (int i = 0; i < n; i++)
```

```
{ if (strcmp(s[i].course, elective3, strlen(elective3)
    == 0)
```

```
{ printf("/s please select from the other 2
    courses \n", s[i].name);
```

```
printf("1. Internet of Things \n 2: Advanced
    Java & J2EE \n");
```

```
printf("Enter your new choice \n");
```

```
scanf("/d", &choice); advanced_data = 0;
```

```
switch (choice)
```

```
{
```

```
case 1:
```

```
strcpy(s[i].course, elective1); iot++;
```

```
break;
```

```
case 2:
```

```
strcpy(s[i].course, elective2); Advanced-java++;
```

```
break;
```

```
}
```

```
}} }
```

```
printf("**** After resolution **** \n");
```

```
printf("No of Student Applied for Internet of
    things is /d \n", iot);
```

```
printf("No of Students Applied for Advanced Java
    & J2EE is /d \n", advanced-java);
```

```
printf("No of Students Applied for Advanced data structure
    is /d \n", advanced_data);
```

```
printf("**** \n");
```



```
for (int i=0 ; i<n; i++)  
{  
    printf ("%s has selected %s course \n",  
            S[i].name, S[i].course);  
}
```