

Programs for OOP 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);
    }
}
sc.close();
}
}

```

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++)

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```

            {
                System.out.print(k++);

```

```

            }
            System.out.println(" ");

```

```

        }

```

```

    }

```

```

}

```

```
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;
type def struct student { char name[50];
char course[50]; };
std;

int main() { char elective1[50] = "Internet of Things";
char elective2[50] = "Advanced Java And J2EE";
char elective3[50] = "Advanced Data Structures";
printf("Course available are \n It 1: Internet of
things \n It 2: Advanced Java And J2EE \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 of
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("/splease 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++)
```

```
{
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```
    printf ("%s has selected %s course \n",  
            S[i].name, S[i].course);
```

```
}
```

```
}
```