

```
PS C:\Users\sarayu\Desktop\ooj> javac example.java
PS C:\Users\sarayu\Desktop\ooj> java example
Hello world!
PS C:\Users\sarayu\Desktop\ooj>
```



example - Notepad

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```
class example {  
    public static void main(String[] args)  
    {  
        System.out.println("Hello world!");  
    }  
}
```



large - Notepad

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```
class large {
```

```
    public static void main(String[] args) {
        int a=5, b=10, c=15;
        if(a>b && a>c){
            System.out.println("largest of three numbers is:"+a);
        }else if (b>a && b>c){
            System.out.println("largest of three numbers is:"+b);
        }else{
            System.out.println("largest of three numbers is:"+c);
        }
    }
}
```

Windows PowerShell

```
PS C:\Users\sarayu\Desktop\ooj> javac Large.java
PS C:\Users\sarayu\Desktop\ooj> java Large
largest of three numbers is:15
PS C:\Users\sarayu\Desktop\ooj> -
```

Values - Notepad

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```
import java.util.Scanner;

class Values {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("enter the till where numbers should be displayed");
        int n= scanner.nextInt();
        for (int i=1; i<=n;i++){
            System.out.println(i);
        }
    }
}
```

```
PS C:\Users\sarayu\Desktop\ooj> javac Values.java
PS C:\Users\sarayu\Desktop\ooj> java Values
>enter the till where numbers should be displayed
20
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
PS C:\Users\sarayu\Desktop\ooj> _
```

Pattern - Notepad

File Edit Format View Help

```
import java.util.Scanner;
```

```
class Pattern {
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("enter the number of rows");
        int n= scanner.nextInt();
        int c=1;
        for (int i=1; i<=n;i++){
            for (int k=1;k<=i;k++){
                System.out.print(" "+c);
                c++;
            }
            System.out.println();
        }
    }
}
```

```
PS C:\Users\sarayu\Desktop\ooj> javac Pattern.java
PS C:\Users\sarayu\Desktop\ooj> java Pattern
enter the number of rows
4
1
2 3
4 5 6
7 8 9 10
PS C:\Users\sarayu\Desktop\ooj>
```

Grade - Notepad

File Edit Format View Help

```
import java.util.Scanner;

class Grade {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.println("enter the cie marks");
        int cie= scanner.nextInt();
        System.out.println("enter the sse marks");
        int see= scanner.nextInt();
        float total= see+(cie/2);

        if (total>=90){
            System.out.println("S\n");
        }else if (total>=80 && total<90){
            System.out.println("A\n");
        }else if (total>=70 && total<80){
            System.out.println("B\n");
        }else if (total>=60 && total<70){
            System.out.println("C\n");
        }else if (total>=50 && total<60){
            System.out.println("D\n");
        }else if (total>=40 && total<50){
            System.out.println("E\n");
        }else {
            System.out.println("F\n");
        }
    }
}
```

```
PS C:\Users\sarayu\Desktop\oop> javac Grade.java
PS C:\Users\sarayu\Desktop\oop> java Grade
enter the cie marks
40
enter the sse marks
80
S

PS C:\Users\sarayu\Desktop\oop> ■
```

Prime - Notepad

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```
import java.util.Scanner;

class Prime{

    public static void main(String[] args) {
        int j=0;
        Scanner scanner = new Scanner(System.in);
        System.out.println("enter the first number");
        int a= scanner.nextInt();
        System.out.println("enter the last number");
        int b= scanner.nextInt();

        for (int i=a; i<=b; i++){
            for (int k=2; k<=i/2; k++){
                if (i%k==0){
                    j = 0;
                    break;
                }else {
                    j=1;
                }
            }
            if (j==1){
                System.out.println(i);
            }
        }
    }
}
```

Windows PowerShell

```
PS C:\Users\sarayu\Desktop\ooj> javac Prime.java
PS C:\Users\sarayu\Desktop\ooj> java Prime
enter the first number
5
enter the last number
25
5
7
11
13
17
19
23
PS C:\Users\sarayu\Desktop\ooj> _
```



```
1 #include<stdio.h>
2 #include<string.h>
3
4 struct getname {
5     char name[10];
6 };
7 int main() {
8     struct getname arr[100];
9     int n;
10    int cnt1 = 0,cnt2 = 0,cnt3 = 0;
11    int a[100];
12    printf("Students are required to fill in their details
13        and choice of electives\n");
14    printf("Choices for electives: \n");
15    printf("1.Internet of things\n2.Advanced Java\n3.Advance
16        DS\n");
17    int num;
18    printf("Enter the total number of students: ");
19    scanf("%d",&num);
20    for(int i=0;i<num;i++) {
21        printf("Enter the name of student : ");
22        scanf("%s",&arr[i].name);
23        printf("Enter your choice : ");
24        scanf("%d",&n);
25        a[i] = n;
26        if(a[i] == 1) {
27            cnt1++;
28        }
29    }
30    printf("The count of students who chose Internet of things is %d",cnt1);
31 }
```

```
25     if(a[i] == 1)  {
26         cnt1++;
27     }
28     else if(a[i] == 2) {
29         cnt2++;
30     }
31     else if(a[i] == 3) {
32         cnt3++;
33     }
34 }
35
36 printf("Operation 1\n");
37 int x;
38 printf("Enter the choice of elective you want to get the
39 list for: ");
40 scanf("%d",&x);
41 for (int i = 0; i < num; i++)
42 {
43     if(a[i] == x) {
44         printf(">%s\n",arr[i].name);
45     }
46
47     printf("Operation 2\n");
48     if(cnt1<3) {
49         cnt1 = 0;
50         printf("All elective one students are required to chose
51 different elective.\n");
52         for(int i=0;i<num;i++) {
```

main.c

```
50     printf("All elective one students are required to chose  
different elective.\n");  
51     for(int i=0;i<num;i++) {  
52         if(a[i] == 1) {  
53             printf("%s Select from elective 2 or 3: ",arr[i]  
.name);  
54             scanf("%d",&n);  
55             a[i] = n;  
56             if(n == 3)  
57                 cnt3++;  
58             else if(n == 2)  
59                 cnt2++;  
60         }  
61     }  
62     if(cnt2<3) {  
63         cnt2 = 0;  
64         printf("All elective two students are required to chose  
different elective.\n");  
65     }  
66     for(int i=0;i<num;i++) {  
67         if(a[i] == 2) {  
68             printf("%s Select from elective 1 or 3: ",arr[i]  
.name);  
69             scanf("%d",&n);  
70             a[i] = n;  
71             if(n == 1)  
72                 cnt1++;  
73             else if(n == 3)  
74                 cnt3++;  
75     }
```

main.c

```
14     |||     Cnt3++;
75     }
76 }
77 }
78 if(cnt3<3) {
79     cnt3 = 0;
80     printf("All elective three students are required to
choose different elective.\n");
81     for(int i=0;i<num;i++) {
82         if(a[i] == 3) {
83             printf("%s Select from elective 2 or 1: ",arr[i]
84             .name);
85             scanf("%d",&n);
86             a[i] = n;
87             if(n == 1)
88                 cnt1++;
89             else if(n == 2)
90                 cnt2++;
91         }
92     }
93     printf("Operation 3\n");
94     printf("Number of students in elective one : %d",cnt1);
95     printf("Number of students in elective two : %d",cnt2);
96     printf("Number of students in elective three : %d",cnt3);
97
98     printf("Operation 4\n");
99     printf("List of students in elective 1: ");
100    for (int i = 0; i < num; i++)
```

main.c

```
98     printf("Operation 4\n");
99     printf("List of students in elective 1: \n");
100    for (int i = 0; i < num; i++)
101    {
102        if(a[i] == 1) {
103            printf(">%s\n",arr[i].name);
104        }
105    }
106
107    printf("List of students in elective 2: \n");
108    for (int i = 0; i < num; i++)
109    {
110        if(a[i] == 2) {
111            printf(">%s\n",arr[i].name);
112        }
113    }
114
115    printf("List of students in elective 3: \n");
116    for (int i = 0; i < num; i++)
117    {
118        if(a[i] == 3) {
119            printf(">%s\n",arr[i].name);
120        }
121    }
122
123 }
```

```
> clang-7 -pthread -lm -o main main.c
main.c:21:14: warning: format specifies type 'char *' but the
argument has type 'char (*)[10]' [-Wformat]
    scanf("%s",&arr[i].name);
                ^~~~~~
1 warning generated.
> ./main
Students are required to fill in their details and choice of electives
Choices for electives:
1. Internet of things
2. Advanced Java
3. Advance DS
Enter the total number of students: 4
Enter the name of student : a
Enter your choice : 1
Enter the name of student : b
Enter your choice : 2
Enter the name of student : c
Enter your choice : 3
Enter the name of student : d
Enter your choice : 3
Operation 1
Enter the choice of elective you want to get the list for: 3
>c
>d
Operation 2
All elective one students are required to chose different elective.
a Select from elective 2 or 3: 2
All elective two students are required to chose different elective.
a Select from elective 1 or 3: 1
b Select from elective 1 or 3: 3
Operation 3
```

>d

Operation 2

All elective one students are required to choose different elective.

a Select from elective 2 or 3: 2

All elective two students are required to chose different elective.

a Select from elective 1 or 3: 1

b Select from elective 1 or 3: 3

Operation 3

Number of students in elective one : 1Number of students in elective two : 0Number of students in elective three : 3

Operation 4

List of students in elective 1:

>a

List of students in elective 2:

List of students in elective 3:

>b

>c

>d

> ■