

HelloWorld.java

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

Desktop — -zsh — 80x27

```
[poojaraghu@Poojas-MacBook-Pro Desktop % javac HelloWorld.java  
[poojaraghu@Poojas-MacBook-Pro Desktop % clear
```

```
[poojaraghu@Poojas-MacBook-Pro Desktop % javac HelloWorld.java  
[poojaraghu@Poojas-MacBook-Pro Desktop % ls  
HelloWorld.class  
HelloWorld.java  
HellowWorld.class  
Microsoft_Office_16.41.20091302_HomeStudent_Installer.pkg  
[poojaraghu@Poojas-MacBook-Pro Desktop % java HelloWorld  
Hello World  
poojaraghu@Poojas-MacBook-Pro Desktop %
```


Main.java

```
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);  
        }  
    }  
}
```


Desktop — -zsh — 80x24

```
[poojaraghu@Poojas-MacBook-Pro ~ % javac -version
javac 15
[poojaraghu@Poojas-MacBook-Pro ~ % cd Desktop/
[poojaraghu@Poojas-MacBook-Pro Desktop % ls
HelloWorld.class
HelloWorld.java
HellowWorld.class
Microsoft_Office_16.41.20091302_HomeStudent_Installer.pkg
[poojaraghu@Poojas-MacBook-Pro Desktop % touch Main.java
[poojaraghu@Poojas-MacBook-Pro Desktop % open Main.java
[poojaraghu@Poojas-MacBook-Pro Desktop % javac Main.java
[poojaraghu@Poojas-MacBook-Pro Desktop % ls
HelloWorld.class
HelloWorld.java
HellowWorld.class
Main.java
Microsoft_Office_16.41.20091302_HomeStudent_Installer.pkg
large.class
[poojaraghu@Poojas-MacBook-Pro Desktop % java Main
Error: Could not find or load main class Main
Caused by: java.lang.ClassNotFoundException: Main
[poojaraghu@Poojas-MacBook-Pro Desktop % java large
largest of three numbers is:15
poojaraghu@Poojas-MacBook-Pro Desktop %
```

```
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();
        }
    }
}
```

```
Desktop — -zsh — 80x24
[poojaraghu@Poojas-MacBook-Pro Desktop % javac Pattern.java
[poojaraghu@Poojas-MacBook-Pro Desktop % ls
HelloWorld.class
HelloWorld.java
HellowWorld.class
Main.java
Microsoft_Office_16.41.20091302_HomeStudent_Installer.pkg
Pattern.class
Pattern.java
large.class
[poojaraghu@Poojas-MacBook-Pro Desktop % java Pattern
enter the number of rows
4
1
2 3
4 5 6
7 8 9 10
poojaraghu@Poojas-MacBook-Pro Desktop %
```


Value.java

```
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);
        }
    }
}
```

Desktop — -zsh — 80x24

```
poojaraghu@Poojas-MacBook-Pro Desktop % java Values
enter the till where numbers should be displayed
6
1
2
3
4
5
6
poojaraghu@Poojas-MacBook-Pro Desktop %
```



```
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");
        }
    }
}
```

Desktop — -zsh — 80x24

```
poojaraghu@Poojas-MacBook-Pro Desktop % java Grade
```

```
enter the cie marks
```

```
38
```

```
enter the sse marks
```

```
42
```

```
C
```

```
poojaraghu@Poojas-MacBook-Pro Desktop %
```



```
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);
            }
        }
    }
}
```

Desktop — -zsh — 80x24

```
[poojaraghu@Poojas-MacBook-Pro Desktop % java Prime
```

```
enter the first number
```

```
7
```

```
enter the last number
```

```
9
```

```
7
```

```
poojaraghu@Poojas-MacBook-Pro Desktop %
```



```
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 and choice of
13     electives\n");
14     printf("Choices for electives: \n");
15     printf("1.Internet of things\n2.Advanced Java\n3.Advance DS\n");
16
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         else if(a[i] == 2) {
30             cnt2++;
31         }
32         else if(a[i] == 3) {
33             cnt3++;
34         }
35     }
36
37     printf("Operation 1\n");
38     int x;
39     printf("Enter the choice of elective you want to get the 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     }
```



```
42     if(a[i] == x) {
43         printf(">%s\n",arr[i].name);
44     }
45 }
46
47 printf("Operation 2\n");
48 if(cnt1<3) {
49     cnt1 = 0;
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 }
63 if(cnt2<3) {
64     cnt2 = 0;
65     printf("All elective two students are required to chose different
elective.\n");
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         }
76     }
77 }
78 if(cnt3<3) {
79     cnt3 = 0;
80     printf("All elective three students are required to chose 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].name);
```



```
80      printf("All elective three students are required to chose different\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].name);
84              scanf("%d",&n);
85              a[i] = n;
86              if(n == 1)
87                  cnt1++;
88              else if(n == 2)
89                  cnt2++;
90          }
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: \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: 7

Enter the name of student : AB

Enter your choice : 1

Enter the name of student : BC

Enter your choice : 2

Enter the name of student : CD

Enter your choice : 2

Enter the name of student : DE

Enter your choice : 2

Enter the name of student : EF

Enter your choice : 3

Enter the name of student : FG

Enter your choice : 3

Enter the name of student : GH

Enter your choice : 3

Operation 1

Enter the choice of elective you want to get the list



Enter your choice : 3

Operation 1

Enter the choice of elective you want to get the list for: 2

>BC

>CD

>DE

Operation 2

All elective one students are required to chose different elective.

AB Select from elective 2 or 3: 3

Operation 3

Number of students in elective one : 0  
Number of students in elective two : 3  
Number of students in elective three : 4

operation 4  
List of students in elective 1:

List of students in elective 2:

>BC

>CD

>DE

List of students in elective 3:

>AB

>EF

>FG

>GH