

# Day 2

## Software installations and pre-requisites

These essential concepts listed below will be covered in this class.

- Installing JAVA DEVELOPMENT KIT – JDK.
- Setting path.
- Composing first program.
- How to compile first java program.
- How to run first java program.

### How to download the jdk:-

1. Installation of jdk 1.8
2. [www.oracle.com](http://www.oracle.com)
3. click jdk download
4. click jdk for windows

### Composing first java program:-



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

Class name should write in capital letters. Example: Hello

Public static void main (String [] arg):- this is main method in java; every java program starts run in this method.

### How to save the file:-

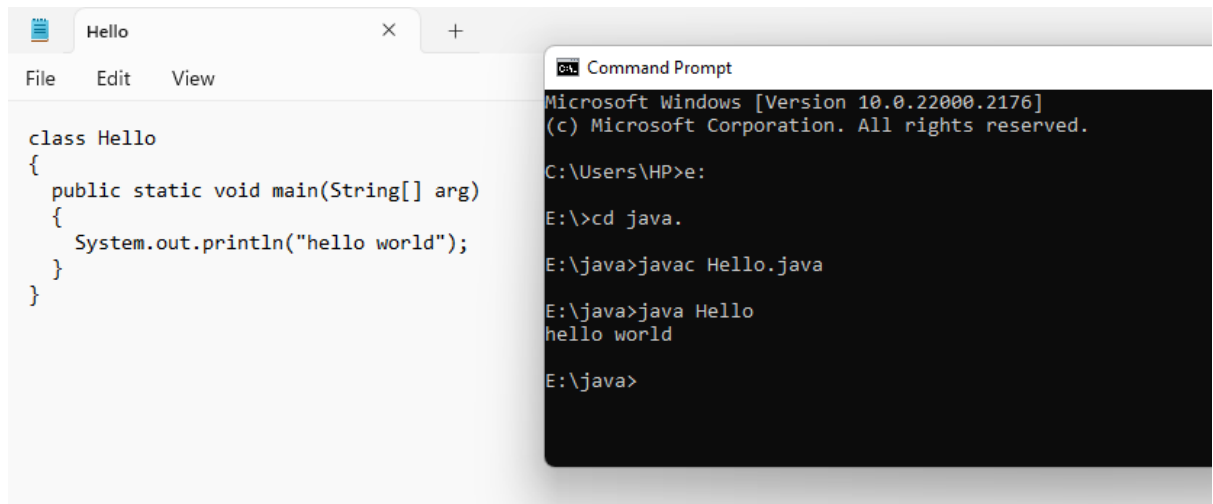
The file should be saved in this format i,e class name.java Example :Hello.java

### Compile the program:-

In java programing we compile the program using the word javac.

Javac Hello.java.

After compilation we run the java program i,e java Hello.



The screenshot shows an IDE window with a tab titled 'Hello'. The code in the editor is:

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

Overlaid on the IDE is a 'Command Prompt' window. It shows the following commands and output:

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>e:

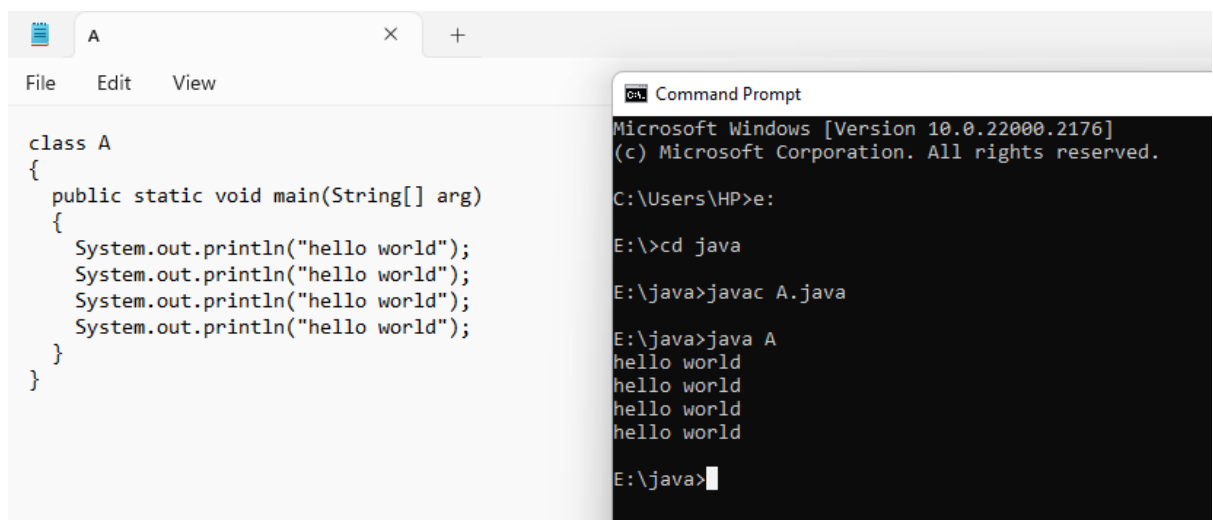
E:\>cd java.

E:\java>javac Hello.java

E:\java>java Hello
hello world

E:\java>
```

### Some of the programming examples:-



The screenshot shows an IDE window with a tab titled 'A'. The code in the editor is:

```
class A
{
    public static void main(String[] arg)
    {
        System.out.println("hello world");
        System.out.println("hello world");
        System.out.println("hello world");
        System.out.println("hello world");
    }
}
```

Overlaid on the IDE is a 'Command Prompt' window. It shows the following commands and output:

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

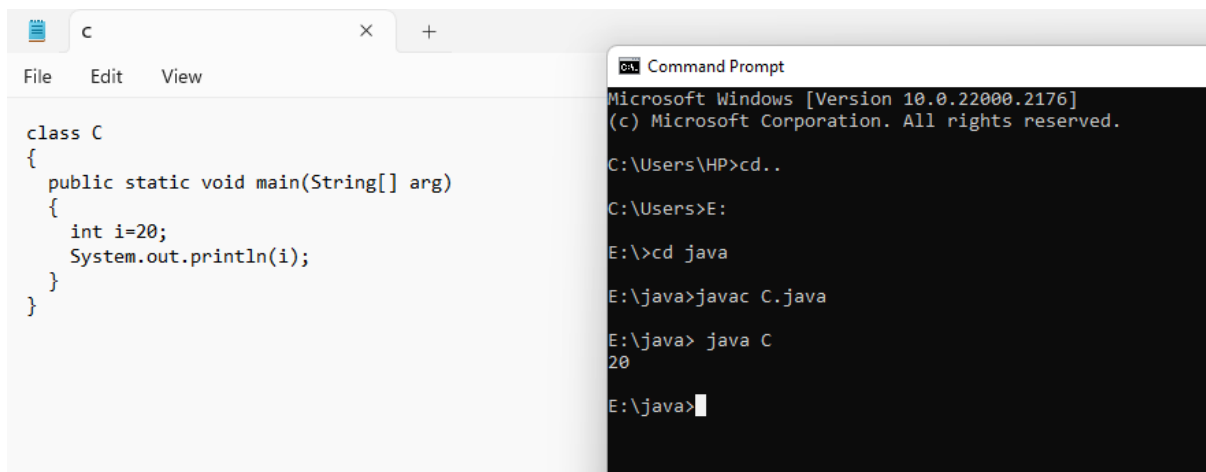
C:\Users\HP>e:

E:\>cd java

E:\java>javac A.java

E:\java>java A
hello world
hello world
hello world
hello world

E:\java>
```



The screenshot shows an IDE window with a tab titled 'C'. The code in the editor is:

```
class C
{
    public static void main(String[] arg)
    {
        int i=20;
        System.out.println(i);
    }
}
```

Overlaid on the IDE is a 'Command Prompt' window. It shows the following commands and output:

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>cd..

C:\Users>E:

E:\>cd java

E:\java>javac C.java

E:\java> java C
20

E:\java>
```

```
class D
{
    public static void main(String[] arg)
    {
        int i=20;
        int j=i;
        System.out.println(i);
    }
}
```

```
Microsoft Windows [Version 10.0.22000.2176]
(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>E:

E:\>cd java

E:\java>javac D.java

E:\java> java D
20

E:\java>
```

```
class F
{
    public static void main(String[] arg)
    {
        int i=0;
        int j=i++ +i + i++ +i;
        System.out.println(i);
        System.out.println(j);
    }
}
```

```
C:\Users>cd..

C:\>e:

E:\>cd java

E:\java>javac F.java

E:\java>java F
2
4

E:\java>
```

```
class M
{
    public static void main(String[] arg)
    {
        int i=0;
        double j=40.1;
        boolean k=true;
        System.out.println(i);
        System.out.println(j);
        System.out.println(k);
    }
}
```

```
E:\java>javac M.java

E:\java>java M
0
40.1
true

E:\java>
```

