

# Chapter 2: Java Fundamentals



Java Program  
Structure



# Content

- Java Program Structure
- Salam Program
- Saving, Compiling and Running Java Programs
- Comments

# Java Program Structure

```
// import Section - import used java libraries
public class MyProgramName {

    // main method
    public static void main( String args[] ){
        // Declaration section - Declare needed variables

        // Input section - Enter required data

        // Processing section - Processing Statements

        // Output section - Display expected results

    } // end main

} // end class
```

# Salam Program

```
// import section: Empty
public class MySalamProgram {

    // main method
    public static void main( String args[] ){
        // Declaration section: Empty

        // Input section: Empty

        // Processing section: Empty

        // Output section
        System.out.println("... Assalamo Alaikom ...");

    } // end main

} // end class
```

# Saving, Compiling and Running Java Programs

- Saving a Java program.
  - A file having a name same as the class name should be used to save the program. The extension of this file is ".java".
    - Salam program should be saved in a file called "*MySalamProgram.java*".
- Compiling a Java program.
  - Call the Java compiler **javac**:
    - **javac** *MySalamProgram.java*
    - The Java compiler generates a file called "*MySalamProgram.class*" (the bytecode).
- Running a Java program
  - Call the Java Virtual Machine **java**:
    - **java** *MySalamProgram.class*

# Comments in a Java Program

- *Comments* are used to describe what your code does and aid reading your code.
- The Java compiler ignores them.
- Comments are made using
  - *//*, which comments to the end of the line,
  - or */\* \*/*, everything inside of it is considered a comment (including multiple lines). The comment begins after the first */\**. It ends just before the first *\*/*.

- Examples:

*/\* This comment begins at this line.  
This line is included in this comment  
It ends at this line. \*/*

*// This comment starts here and ends at the end of this line.*