**Mona Roshan**

**Period 7**

**Lesson 1: Introduction to Programming**

**AP Comp Sci Notes**

Assembly code:

your written code is stored in a regular text file w a java extension

Setting up the JDK:

contains the files necessary to compile and execute your code

Writing your first program:

open notepad++ and drag and drop first Prog.java into the new tab. Type code.

Compiling a Program:

Translating your assembly code into Java bytecode that your computer can read

Executing a Program with the JVM

An intermediate

JVM can translate into machine code

Put a \ before any / and “

The code:

public class firstProg

{

public static void main(String[]args)

{

System.out.println(“Hello Again”) ;

}

}

Escape Characters

an **escape character** is a **character** which has an alternative interpretation on subsequent **characters** in a **character** sequence

Symbols such as quotation marks and backslashes require backslashes before them.

* \t Inserts a tab in the text at this point.
* \b Inserts a backspace in the text at this point.
* \n inserts a newline in the text at this point.
* \r inserts a carriage return in the text at this point.
* \f inserts a form feed in the text at this point.
* \' inserts a single quote character in the text at this point.
* \" inserts a double quote character in the text at this point.
* \\ inserts a backslash character in the text at this point.
* \v vertical tab (IE < 9 treats '\v' as 'v' instead of a vertical tab ('\x0B'). If cross-browser compatibility is a concern, use \x0B instead of \v.)
* \0 null character (U+0000 NULL) (only if the next character is not a decimal digit; else it is an octal escape sequence)

ASCII Art

**ASCII art** is a graphic design technique that uses [computers](https://en.wikipedia.org/wiki/Computer) for presentation and consists of pictures pieced together

Examples:

"Typewriter-style" lettering, made from individual letter characters:

H H EEEEE L L OOO W W OOO RRRR L DDDD !!

H H E L L O O W W W O O R R L D D !!

HHHHH EEEEE L L O O W W W O O RRRR L D D !!

H H E L L O O ,, W W O O R R L D D

H H EEEEE LLLLL LLLLL OOO ,, W W OOO R R LLLLL DDDD !!

Line art, for creating shapes:

.--. /\ \_\_\_\_

'--' /\_\_\ (^.\_.^)~ <(o.o )>

Solid art, for creating filled objects:

.g@8g. db

'Y8@P' d88b

Shading, using symbols with various intensities for creating gradients or contrasts:

:$#$: "4b. ':.

:$#$: "4b. ':.