**Running Java programs in Android studio**

New project -> file -> new -> new module -> Java or Kotlin library -> language= Java -> finish

**Comments**

* **//**
* **/\*\*/**

**Main method syntax**

***“public static void main(String[] args){}”***

***Java output***

***System.out.print()***

*Note: to run the code just select the run button on the left*

***Variables***

*Store information that you want to use later*

***Data types***

1. *Primitive*
2. *Reference (class, array, objects)*

***Numbers***

1. *Byte -128 -> 127*
2. *Short -32,768 -> 32,767*
3. *Integer -2,147,483,648 -> 2,147,483,647*
4. *Long -9,223,372,036,854,775,808L -> 9,223,372,036,854,775,807L*

***Decimals***

1. *Float 3.14F*
2. *Double 3.14159*

***Boolean***

***Character include (\t and \n)***

***Type casting***

* *Implicit*
* *Explicit -> down casting or data loss*
* *Different types (char + int) = acii table values of letter*

***Operators***

* *Arithmetic*
* *Comparison*
* *Logical*

***Strings***

*Represent and manipulate a sequence of characters*

***Conditional statements***

* ***If***
* ***If-else***
* ***If-else if – else***
* ***Switch*** 
  + ***switch(variable){***
    - ***case “value of variable”:***
      * ***“Respond”***
      * ***break;***
    - ***case “value of variable”:***
      * ***“Respond”***
      * ***break;***
    - ***…***
    - ***default:***
      * ***“Respond”***
      * ***Break;***
  + ***}***

***While loop***

***For loop***

***Break & continue keywords***

*Continue jumps the rest of the block and continue the loop*

***Arrays***

*Store multiple values of the same data type*

***For each loop***

*Access all the elements in the array*

*for(datatype variable : collection[array]){*

*}*

***Multidimensional array***

*Array of arrays (table’s that has rows and columns)*

*datatype[][] arrayName = new datatype[rows][columns]*