

# AP CS Java Syntax Summary:

## Basic Java Program: Class & main:

```
public class name {  
    public static void main(String[] args) {  
        statement;  
        ...  
        statement;  
    }  
}
```

## Println – Print line:

```
System.out.println("<string>");
```

## Escape Character within a string: the backslash \

## Comments:

```
// comment text, on one line  
/* comment text; may span multiple lines */
```

## Static Method creation:

```
public static void name() {  
    statement;  
    ...  
    statement;  
}  
  
name(); // Calling a Static Method
```

## Primitive Types:

```
int name = <value>; // create an Integer  
double name = <value>; // create an Double - real numbers  
char name = '<single character>'; // create a single character  
boolean name = true; // creates a Boolean of true or false.
```

## For Loop:

```
for (initialization; test; update) {  
    statement;  
    ...  
    statement;  
}
```

## Example:

```
for (int i = 1; i <= 6; i++) {  
    System.out.println("I am so smart");  
}
```

## Shorthand

```
variable++;  
variable--;
```

## Equivalent longer version

```
variable = variable + 1;  
variable = variable - 1;
```

```
variable += value;   variable = variable + value;  
variable -= value;   variable = variable - value;  
variable *= value;   variable = variable * value;  
variable /= value;   variable = variable / value;  
variable %= value;   variable = variable % value;
```

**Class Constant:**

```
public static final type NAME = value;
```