

Review 1 (Modules 1 - 5)

- Variables
- Arrays
- Control structures
- Class properties
- Class methods
- Class constructors
- Projects

Variables

```
String myName = "Marcos Minond";  
boolean isAlive = true;  
int age = 92;
```

Arrays

```
String[] friends = {  
    "Abdikadir",  
    "Abdirahman",  
    "Abdullah",  
    "Ali",  
    "Ali",  
    "Benahin",  
    "Garroe",  
    "Indrias",  
    "Khem",  
    "Matios",  
    "Mohamed ",  
    "Mohammed",  
    "Passy",  
    "Patrick",  
    "Tamrat"  
};
```

Working with arrays

```
System.out.println(friends[0]);    // "Abdikadir"  
System.out.println(friends[1]);    // "Abdirahman"  
System.out.println(friends.length); // 15
```

Control structures

if

```
if (conditional) {  
    // body  
}
```

if/else

```
if (conditional) {  
    // body  
} else {  
    // body  
}
```

if/else if/else

```
if (conditional) {  
    // body  
} else if (conditional) {  
    // body  
} else if (conditional) {  
    // body  
} else if (conditional) {  
    // body  
} else {  
    // body  
}
```


for

```
for (initialize; check; increment) {  
    // body  
}
```

Class properties

```
class Movie {  
    String title;  
    int releaseYear;  
}  
  
public class MovieRunner {  
    public static void main(String[] args) {  
        Movie starWars = new Movie();  
        starWars.title = "Star Wars";  
        starWars.releaseYear = 1977;  
    }  
}
```

Class methods

```
class Movie {
    String title;
    int releaseYear;

    String getMovieInformation(String greeting) {
        return greeting + ", " + title + " was released in "
            + releaseYear;
    }
}

public class MovieRunner {
    public static void main(String[] args) {
        Movie starWars = new Movie();
        starWars.title = "Star Wars";
        starWars.releaseYear = 1977;

        String info = starWars.getMovieInformation();
        System.out.println(info);
    }
}
```

Class constructors

```
class Movie {
    String title; int releaseYear;

    Movie(String t, int r) {
        title = t;
        releaseYear = r;
    }

    String getMovieInformation(String greeting) {
        return greeting + ", " + title + " was released in "
            + releaseYear;
    }
}

public class MovieRunner {
    public static void main(String[] args) {
        Movie starWars = new Movie("Star Wars", 1977);
        String info = starWars.getMovieInformation("Hello");
        System.out.println(info);
    }
}
```

Projects

Additional resources (1/3)

- *Control structures:*
<http://www.dcs.ed.ac.uk/teaching/cs1/CS1/Ah/Notes/JavaControl.pdf>
- *Control structures:*
https://en.wikiversity.org/wiki/Java_Tutorial/Control_Structures_I_-_Decision_structures
- *Control structures:*
https://www.slideshare.net/Ravi_Kant_Sahu/control-structures-in-java

Additional resources (2/3)

- *Variables, Data Types, and Math Operators* by Jim Wilson
<https://app.pluralsight.com/player?course=java-fundamentals-language&author=jim-wilson&name=java-fundamentals-language-m3&clip=0>
- *Conditional Logic, Looping, and Arrays* by Jim Wilson
<https://app.pluralsight.com/player?course=java-fundamentals-language&author=jim-wilson&name=java-fundamentals-language-m4&clip=0&mode=live>

Additional resources (3/3)

- *Representing Complex Types with Classes* by Jim Wilson
<https://app.pluralsight.com/player?course=java-fundamentals-language&author=jim-wilson&name=java-fundamentals-language-m5&clip=0&mode=live>
- *Class Initializers and Constructors* by Jim Wilson
<https://app.pluralsight.com/player?course=java-fundamentals-language&author=jim-wilson&name=java-fundamentals-language-m6&clip=0&mode=live>
- *A Closer Look at Parameters* by Jim Wilson
<https://app.pluralsight.com/player?course=java-fundamentals-language&author=jim-wilson&name=java-fundamentals-language-m7&clip=0&mode=live>