



جامعة المستقبل
AL MUSTAQBAL UNIVERSITY

كلية العلوم قسم الانظمة الطبية الذكية

Lecture: (13)

❖ Looping And Iteration Part II

Subject: Computer Programming (I)

Level: First

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Java While Loop

The `while` loop loops through a block of code as long as a specified condition is `true`:

```
while (condition) {  
    // code block to be executed  
}
```

In the example below, the code in the loop will run, over and over again, as long as a variable (`i`) is less than 5:

```
public class Main {  
    public static void main(String[] args) {  
        int i = 0;  
        while (i < 5) {  
            System.out.println(i);  
            i++;  
        }  
    }  
}
```

The Do/While Loop

The `do/while` loop is a variant of the `while` loop. This loop will execute the code block once, before checking if the condition is true, then it will repeat the loop as long as the condition is true.

Syntax

```
do {  
    // code block to be executed  
}  
while (condition);
```



- The example below uses a `do/while` loop. The loop will always be executed at least once, even if the condition is false, because the code block is executed before the condition is tested:

```
public class Main {  
    public static void main(String[] args) {  
        int i = 0;  
        do {  
            System.out.println(i);  
            i++;  
        } while (i < 5);  
    }  
}
```

- java program that prints the alphabet from 'a' to 'z' using a while loop:

```
public class AlphabetPrint {  
    public static void main(String[] args) {  
        char ch = 'a';  
  
        while (ch <= 'z') {  
            System.out.print(ch + " ");  
            ch++;  
        }  
    }  
}
```



- Write a program to print multiples of the number 10 up to 1000,000 using Java language and the while loop

```
public class MultiplesOfTen {  
    public static void main(String[] args) {  
        int number = 10;  
        while (number <= 1000000) {  
            System.out.println(number);  
            number += 10;  
        }  
    }  
}
```

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