



**VARIABLE**

IN THE NAME OF ALLAH

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

THE GRACIOUS, THE MERCIFUL.



# **GETS - GETTING EDUCATION WITH TECHNOLOGICAL SYSTEM**

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# LECTURE: 3

## JAVA Variables



# Escape Sequence in java

<code>\t</code>	Inserts a tab
<code>\b</code>	Inserts a backspace
<code>\n</code>	Inserts a newline
<code>\r</code>	carriage return. ()
<code>\f</code>	form feed
<code>'\''</code>	Inserts a single quote
<code>'\"'</code>	Inserts a double quote
<code>\\</code>	Inserts a backslash
List of Escape Sequences in Java	


## RULES FOR DECLARING A VARIABLE NAME:

- Must not begin with a digit (`int 1var;` is invalid)
- Name is case sensitive (`name` and `Name` are different)
- Should not be a keyword (`void`, `static`, `class` etc)
- White space not allowed. (`int just for exp;` is invalid)
- Can be used with (`alphabet`, `$character`, `-character` and `digit`)

# LOCAL VARIABLE

VS


# STATIC VARIABLE

 \*Helloworld.java - Notepad

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```
public class Helloworld{  
  
    public static void main(String[] args){  
        int x = 100;  
        System.out.println(x);  
    }  
}
```

**Assign in the main method**

 Helloworld.java - Notepad

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```
public class Helloworld{  
  
    static int x = 100;  
  
    public static void main(String[] args){  
        System.out.println(x);  
    }  
}
```

**Assign out of main method**



# Naming Convention

PascalNamingConvention

**Classes**

camelNamingConvention

**Methods**



## Type Casting

## Types of Data Types

## Primitive or Fundamental Data Types

## Referenced or Advanced Data Types


## Casting Primitive Data Type

- Widening:** Converting a lower data type into higher data type is called widening.
- Narrowing:** Converting a higher data type into lower data type is called narrowing

**byte    short    char    int    long    float    double**



# Type casting `int` into `byte`

 \*Exp.java - Notepad

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---

```
public class Exp {  
    public static void main(String[] args){  
  
        //type casting  
        int a = 10;  
        byte b = (byte) a;  
  
        System.out.println(b);  
  
    }  
}
```

# Type casting **double** into **int**




\*Exp.java - Notepad

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---

```
public class Exp {  
    public static void main(String[] args){  
  
        //type casting  
        double a = 123456789123D;  
        int b = (int) a;  
  
        System.out.println(b);  
  
    }  
}
```

# Two variable Type casting

 \*Helloworld.java - Notepad

File Edit Format View Help

```
public class Helloworld{  
    public static void main(String[] args){  
        //two variable type casting  
        byte num1 = 20;  
        byte num2 = 50;  
        byte result = (byte) (num1+num2);  
  
        System.out.println(result);  
    }  
}
```

# Assignment

- Write Type casting program in computer and register 10 times.
- Test will be taken tomorrow

# What we have learn from this exercise?

- Rules for declaring a variable name.
- Naming Convention
- Type Casting