

VARIABLE



IN THE NAME OF ALLAH

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

THE GRACIOUS, THE MERCIFUL.

LECTURE: 3

JAVA Variables




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



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

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```
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 the program which display this result using variable in dynamic in one line.

your age in 2022 is: 18

What we have learn from this exercise?

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