

Experiment - 3# AIM

- 1) Implementation of all Java literals.
- 2) Implementation of dynamic initialisation of variables.
- 3) Implementation of scope and lifetime of variables.

PROGRAMS1) Implementation of Java literals

```
public class JavaLiterals {
```

```
    public static void main(String[] args) {
```

```
        int a = 101;
```

```
        // Decimal-form literal
```

```
        int b = 0100;
```

```
        // 0: Octal literal
```

```
        int c = 0xface;
```

```
        // 0x: Hexadecimal literal
```

```
        int d = 0b1111;
```

```
        // 0b: Binary literal
```

```
        System.out.println(a);
```

```
        System.out.println(b);
```

```
        System.out.println(c);
```

```
        System.out.println(d);
```

```
    }
}
```

2) Dynamic Initialisation of variables

```
public class DynVarInit {
```

```
    public static void main(String[] args) {
```

```
        double a = 3.0, b = 4.0;
```

(P.T.O. →)



Teacher's Signature : _____

// c is dynamically initialized (value is calculated at runtime).

```
double c = Math.sqrt(a*a + b*b);
```

```
double d = c*a;
```

```
System.out.println("Hypotenuse is: " + c);
```

```
System.out.println("Value of d: " + d);
```

```
}
```

```
}
```

c) Scope & lifetime of variables

```
public class Scope{
```

```
int num = 20;
```

// Global scope variable

```
void m1(){
```

```
int num = 30;
```

// Local scope variable

```
System.out.println("Local number" + num);
```

```
System.out.println("Global number" + this.num);
```

```
}
```

```
public static void main(String[] args){
```

```
Scope st = new Scope();
```

```
st.m1();
```

```
}
```

```
}
```



Teacher's Signature : _____

File Edit Selection View Go Run Terminal Help Scope.java - Java-Lab - Visual Studio Code

EXPLORER

OPEN EDITORS

- Dynamic... 4, M
- Scope.java... M
- JavaLiterals... M

JAVA-LAB

- .idea
- out
- screenshots
- src
 - exp1
 - exp2
 - exp3
 - DynamicIni... 4, M
 - JavaLiterals.ja... M
 - Scope.java M
- README.md
- untitled104.iml

OUTPUT

Microsoft Windows [Version 10.0.19042.1165]
(c) Microsoft Corporation. All rights reserved.

```
C:\Users\Acer\Documents\GitHub\2021Devs\Java-Lab> cmd /C "c:\Users\Acer\.vscode\extensions\va.vscode-java-debug-0.35.0\scripts\launcher.bat "C:\Program Files\Java\jdk-16.0.2\bin\jav --enable-preview -XX:+ShowCodeDetailsInExceptionMessages -Dfile.encoding=UTF-8 -cp C:\Use r\AppData\Roaming\Code\User\workspaceStorage\acf15c31474062acf565abb34aaaaeec\redhat.java\Java-Lab_831e682\bin exp3.Javaliterals "
```

```
101
64
64206
15
```

```
C:\Users\Acer\Documents\GitHub\2021Devs\Java-Lab> c: && cd c:\Users\Acer\Documents\GitHub\vs\Java-Lab && cmd /C "c:\Users\Acer\.vscode\extensions\vscjava.vscode-java-debug-0.35.0\s \launcher.bat "C:\Program Files\Java\jdk-16.0.2\bin\java.exe" --enable-preview -XX:+ShowCo ilsInExceptionMessages -Dfile.encoding=UTF-8 -cp C:\Users\Acer\AppData\Roaming\Code\User\w ceStorage\acf15c31474062acf565abb34aaaaeec\redhat.java\jdt_ws\Java-Lab_831e682\bin exp3.Dy nitalization "
```

```
Hypotenuse is 5.0
value of d 15.0
```

```
C:\Users\Acer\Documents\GitHub\2021Devs\Java-Lab> c: && cd c:\Users\Acer\Documents\GitHub\2021Devs\Java-Lab && cmd /C "c:\Users\Acer\.vscode\extensions\vscjava.vscode-java-debug-0.35.0\scripts\lau ncher.bat "C:\Program Files\Java\jdk-16.0.2\bin\java.exe" --enable-preview -XX:+ShowCodeDetailsInE xceptionMessages -Dfile.encoding=UTF-8 -cp C:\Users\Acer\AppData\Roaming\Code\User\workspaceStorag e\acf15c31474062acf565abb34aaaaeec\redhat.java\jdt_ws\Java-Lab_831e682\bin exp3.Scope "
```

```
Local number: 30
Global number: 20
```

```
C:\Users\Acer\Documents\GitHub\2021Devs\Java-Lab>
```

OUTLINE

TIMELINE

JAVA PROJECTS

master* Sign in to Jira > No active issue Spaces: 2 UTF-8 JavaSE-16