

Binary Operators:

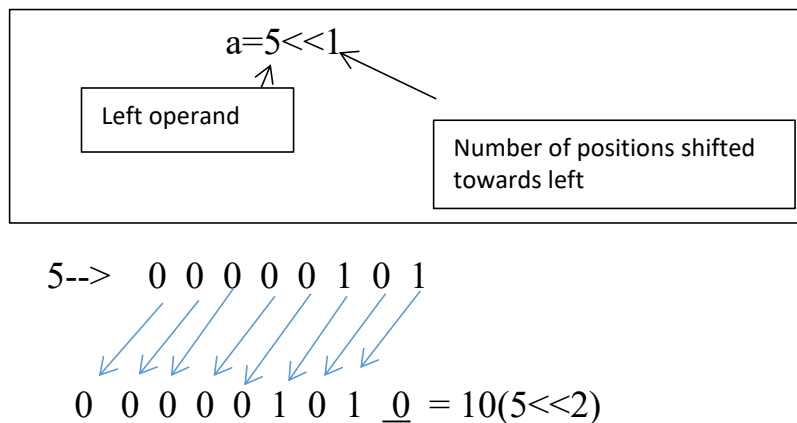
Bitwise Operator:

Bit wise operators work on individual bits of the byte. These are used to manipulate individual bits of only integer data types (byte, short, int, long).

Bitwise Left shift Operator(<<):

Bitwise left shift operator is used to shift the bits of the left operand to the left specified by the number of positions on the right hand side of the operator.

Ex:



So in simpler terms we can say that $5 \ll 1$ means result will be $5 * 2^1$
 $5 \ll 2$ means result will be $5 * 2^2$
 $5 \ll 3$ means result will be $5 * 2^3$ and so on

So in left shift we need to multiply it by $2^{\text{number of positions mentioned on right side}}$ in order to get the result.

```
BitwiseOp.java
File Edit View

class BitwiseOp
{
    public static void main(String[] args)
    {
        int a=5;

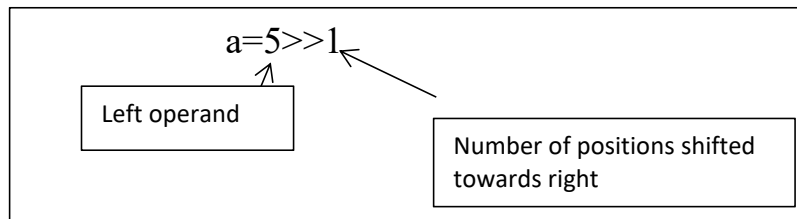
        System.out.println("Left shift of 5<<1 is: "+(a<<1));
    }
}

C:\WINDOWS\system32\cmd.
C:\Users\saili\OneDrive\Desktop\kodnest\programs\Assignments on july 14,17>javac BitwiseOp.java
C:\Users\saili\OneDrive\Desktop\kodnest\programs\Assignments on july 14,17>java BitwiseOp
Left shift of 5<<1 is:10
C:\Users\saili\OneDrive\Desktop\kodnest\programs\Assignments on july 14,17>
```

Bitwise Right shift Operator(>>):

Bitwise right shift operator is used to shift the bits of the left operand to the right specified by number of positions on the right hand side of the operator.

Ex:



5-> 0 0 0 0 0 1 0 1
 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
 0 0 0 0 0 0 1 0 1 (ignore) = 2(2.5)(5/2)

So in simpler terms we can say that $5 \gg 1$ means result will be $5 / 2^1$
 $5 \gg 2$ means result will be $5 / 2^2$
 $5 \gg 3$ means result will be $5 / 2^3$ and so on

So in left shift we need to divided it by $2^{\text{number of positions mentioned on right side}}$ in order to get the result.

The screenshot shows a Java IDE window titled "BitwiseOp.java" with the following code:

```
class BitwiseOp
{
    public static void main(String[] args)
    {
        int a=5;

        System.out.println("right shit of 5>>1 is:"+(a>>1));
    }
}
```

Below the IDE, a command prompt window shows the execution of the program:

```
C:\Users\saili\OneDrive\Desktop\kodnest\programs\Assignments on july 14,17>javac BitwiseOp.java
C:\Users\saili\OneDrive\Desktop\kodnest\programs\Assignments on july 14,17>java BitwiseOp
right shit of 5>>1 is:2
C:\Users\saili\OneDrive\Desktop\kodnest\programs\Assignments on july 14,17>
```

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EDUCATION

Santhiram Engineering College, Nandyal — Bachelor's Degree in Computer Science and Engineering

AUGUST 2019 - MAY 2023

Percentage: 83.26%

Rao's Junior College, Nandyal — Maths, Physics, Chemistry

JUNE 2017 - MARCH 2019

Percentage : 92.05%

Good Shepherd English Medium School, Nandyal — Secondary School Certification Examination

MARCH 2017

Percentage : 95.0%

PROJECTS

Driver Drowsiness Monitoring System Using Visual Behaviour

- The objective of this project is to prevent the road accidents that are occurring due to driver drowsiness.
- By Calculating the Eye Aspect Ratio and Mouth Opening Ratio we can detect yawn count and eye closure and give the alert to the driver.

Audio Steganography Using LSB and Symmetric Key

- Audio Steganography is about hiding the secret message into the audio.
- It is a technique used to secure the transmission of secret information or hide their existence.

OTHER INITIATIVES

- Worked as Radio Jockey at Campus Radio and had done weekly Podcasts on Younify Radio App.
- Organized college fest.

SKILLS

Java Programming

Python Programming

SQL Programming

AWARDS

- Presented a paper on “**Machine Learning**” and stood 2nd position at 16th National Level Technical Symposium at RGM Engineering College.
- Participated in National level E-Quiz on “**Java Programming**” organized by Indian Servers.
- Completed online course “The Joy of Computing Using Python” offered by NPTEL.

PAPER PUBLICATION

International Journal of Progressive Research in Engineering Management and Science (IJPREMS), Volume 03, Issue 04, April 2023.

Paper ID: IJPREMS30400009115

[**DRIVER DROWSINESS**](#)

LANGUAGES

Telugu, English

HOBBIES

Doing Podcasts, Writing Reviews