

### Practical-3

1. WAP to type casting to get a random integer.  
eg. Range: 0-6  
Your random integer is: 5
2. WAP to show use of implicit and explicit typecasting.
3. WAP to find maximum and minimum of two numbers using conditional operator.
4. WAP to accept three values from user using scanner class and find highest & lowest value from given three values.
5. Declare an int variable i initialize it to 4, and then test the following increment and decrement statements. Comment on the obtained output.

Statement	Output	Comments
System.out.println (++ i);		
System.out.println (i);		
System.out.println (i++);		
System.out.println (i);		
System.out.println (--i);		
System.out.println (i--);		
System.out.println (i);		

6. WAP to initialize the three variables x = 9, y = 2.3, and z = 5.2. Display the result of each of the following arithmetic expressions using a System.out.println ( ) statement. In the Interpretation column, find out the precedence rules discussed in the lecture.

Arithmetic Expression	Result	Interpretation
$x + y * z$		
$x / y * z$		
$x / 2 + y / 2$		
$x \% 5 * 3 + 1$		
$(y + 3) * 2$		
$z / (1 + 1)$		

7. WAP to print the appropriate message according to the average Marks:  
(Note: Using Switch case)

Average Marks	Grade
90 to 100	A+
80 to 89	A
60 to 79	B
50 to 59	B+
40 to 49	C
0 to 39	F

8. WAP of interactive user input to guess a number.

eg. I'm thinking of a number between 1 and 1,000,000

What's your guess? 500000

Too high

What's your guess? 250000

Too low

What's your guess? 375000

Too high

9. WAP to prints a table of the powers of 2 that are less than or equal to  $2^N$  using scanner.