Chapter -2

2.1 Fill in the blanks in each of the following statements:

a) A(n) **left brace ({)** begins the body of every method, and a(n) **right brace (})**. ends the body of every method.
b) The **if** statement is used to make decisions.

c) **//** begins an end-of-line comment.

d)**Space character**, **newlines** and **tabs** are called white space.

e) **Keywords** are reserved for use by Java.
f) Java applications begin **main** execution at method .
g) Methods **System.out.print, System.out.println and System.out.printf** display information in a command window.

2.2 State whether each of the following is *true* or *false*. If *false*, explain why.
a) Comments cause the computer to print the text after the // on the screen when the program executes.
Ans: False. **Comments do not cause any action to be performed when the program executes. They're used to document programs and improve their readability**.

b) All variables must be given a type when they're declared.
True.

c) Java considers the variables number and NuMbEr to be identical.
False. Java is case sensitive, so these variables are distinct.

d) The remainder operator (%) can be used only with integer operands.
False. The remainder operator can also be used with noninteger operands in Java.

e) The arithmetic operators *, /, %, + and - all have the same level of precedence.
False. The operators *, / and % are higher precedence than operators + and -.

2.3 Write statements to accomplish each of the following tasks:

   a) Declare variables c, thisIsAVariable, q76354 and number to be of type int.
Ans : int c, thisIsAVariable, q76354, number;
or
int c;
int thisIsAVariable;
int q76354;
int number;

   b) Prompt the user to enter an integer.
       Ans : **System.out.print("Enter an integer: ");**

c) Input an integer and assign the result to int variable value. Assume Scanner variable input can be used to read a value from the keyboard.
Ans : **value = input.nextInt();**

d) Print "This is a Java program" on one line in the command window. Use method

System.out.println.
Ans : **System.out.println("This is a Java program");**

e) Print "This is a Java program" on two lines in the command window. The first line should end with Java. Use method System.out.println.
Ans : **System.out.println("This is a Java\nprogram");**

f) Print "This is a Java program" on two lines in the command window. The first line should end with Java. Use method System.out.printf and two %s format specifiers.
Ans : **System.out.printf("%s\n%s\n", "This is a Java", "program");**

g) If the variable number is not equal to 7, display "The variable number is not equal to 7".

Ans : **if (number != 7)**
System.out.println("The variable number is not equal to 7");