2.15   State the order of evaluation of the operators in each of the following C statements and show the value of x after each statement is performed.

a)   x = 8 + 15 * (6 - 2) - 1;
ANS: - within the parentheses, *, +, -, =, 67
b)   x = 5 % 5 + 5 * 5 - 5 / 5;
ANS: %, *, /, +, -, =, 24
c)   x = (5 * 7 * (5 + (7 * 5 / (7))));
ANS: innermost parentheses around 7, *, /, +, *, *, 350

2.17   *(Final velocity)* Write a program that asks the user to enter the initial velocityand acceleration of an object, and the time that has elapsed, places them in the variables u, a, and t, and prints the final velocity, v, and distance traversed, s, using the following equations.

a) $v = u + at$
ANS:

```
#include <stdio.h>
int main()
{
    int v, u, a, t;
     printf("Enter the velocity, acceleration, time as integers : \n");
     scanf("%d, %d, %d",&u,&a, &t);
     v = u + a * t;
     printf("\nThe final velocity is %d\n", v);
     return 0;
}
```

b) $s = ut + \frac{1}{2} at^2$
ANS:

```
#include <stdio.h>

int main()
{
    int s, u, a, t;
     printf("Enter the velocity, acceleration, time as integers : \n");
     scanf("%d, %d, %d",&u,&a, &t);
     s = u * t + a * t * t;
     printf("The distance traversed is %d\n ", s);

     return 0;
}
```

2.18   *(Comparing Values)* Write a program that asks the user to enter the highest rainfall ever in one season for a country, and the rainfall in the current year for that country, obtains the values from the user, checks if the current rainfall exceed the highest rainfall and prints an appropriate message on the screen. If the current rainfall is higher, it assigns that value as the highest rainfall ever. Use only the single-selection form of the if statement you learned in this chapter.