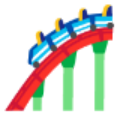

Structs

1. Write a program to add two distances in inch-feet using structure. The values of the distances are to be taken from the user.

2. Write a program to compare two dates entered by the user. Make a structure named Date to store the elements day, month and year to store the dates. If the dates are equal, display "Dates are equal"; otherwise, display "Dates are not equal".

3. Let us work on the menu of a library. Create a structure containing book information like accession number, author name, book title and flag to know whether the book is issued or not.
   Create a menu in which the following can be done.
   1 - Display book information
   2 - Add a new book
   3 - Display all the books in the library of a particular author
   4 - Display the number of books of a specific title
   5 - Display the total number of books in the library
   6 - Issue a book
   (If we issue a book, then its number gets decreased by one (1), and if we add a book, its number gets increased by 1)

4. Predict the output of the following program:

```
struct Pixel
{
            int C, R;
};


void Display(Pixel P)
```

```
{
            cout << "Col "<< P.C << " Row " << P.R << endl;
}


int main()
{
            Pixel X = {40,50}, Y, Z;
            Z = X;
            X.C += 10;
            Y = Z;
            Y.C += 10;
            Y.R += 20;
            Z.C -= 15;
            Display(X);
            Display(Y);
            Display(Z);

            return 0;
}
```

5. Predict the output of the following program:

```
struct Play
{
            int score, bonus;
};


void calculate(Play &P, int N = 10)
{
            P.score++;
            P.bonus += N;
}


int main()
{
            Play PL = {10, 15};
            calculate(PL, 5);
            cout << PL.score << ":" << PL.bonus << endl;
            calculate(PL);
            cout << PL.score << ":" << PL.bonus << endl;
            calculate(PL, 15);
            cout << PL.score << ":" << PL.bonus << endl;

            return 0;
}
```

6. Predict the output of the following program:

```
struct MyBox
{
            int length, breadth, height;
};


void dimension (MyBox M)
{
            cout << M.length << "x" << M.breadth << "x";
            cout << M.height << endl;
}


int main ()
{
            MyBox B1 = {10, 15, 5}, B2, B3;
            ++B1.height;
            dimension(B1);
            B3 = B1;
            ++B3.length;
            B3.breadth++;
            dimension(B3);
            B2 = B3;
            B2.height += 5;
            B2.length--;
            dimension(B2);

           return 0;
}
```