```
#include <iostream>
#include <iomanip>
#include <sstream>
using namespace std;

const int MAX_BOOKS = 10;

struct Book
{
   string no;
   string title;
   string author;
   double price;
};
struct creditCard
{
   string cardNumber;
   string password;

};
void addToCart(Book cart[],int &cartSize, Book books[], int numBooks, const string &input)
{
   int index;
   istringstream iss(input);
   while(iss >> index)
         {
      index--;
      if (index>=0 && index <numBooks)
                  {
         if(cartSize <MAX_BOOKS)
                           {
            cart[cartSize++]= books[index];
         }
         else
                           {
            cout <<"\nCart is full" <<endl;
            break;
         }
      }
      else
                  {
         cout << "Invaild book index";
         break;
      }

   }
}
```

```
bool Payment(creditCard &creditCard)
{
   cout << "Enter Credit/Debit card details:" <<endl;
   cout << "Credit Number: ";
   cin >> creditCard.cardNumber;
   cout << "Password: ";
   cin >> creditCard.password;
   cout << endl <<endl;

   return !creditCard.cardNumber.empty() && !creditCard.password.empty();
}

void availableBooks(Book books[], int numBooks)
{
   cout << "      --Available Books--     " << endl;
   for (int i = 0; i< numBooks; i++)
         {
      cout <<books[i].no << "Title: " << setw(20)<< left << books[i].title << "\t Price: $" <<
                  fixed <<setprecision(2) << setw(6) << right <<books[i].price << endl
                  << "   Author: " << books[i].author <<endl <<endl;
   }
   cout << endl << "      ----------      "<<endl;
}

void searchBooks (Book books[], int numBooks, const string& search)
{
   cout << "      --Searhced Books--     " << endl;
   for(int i = 0 ; i<numBooks; ++i)
         {
      if(books[i].title.find(search) != string :: npos || books[i].author.find(search) != string ::
npos)
                  {
         cout<<books[i].no << "Title: " << setw(20) << left << books[i].title
                        << "\tPrice: $" <<fixed <<setprecision(2) << setw(6) <<right
<<books[i].price << endl
                        << "   Author: " << books[i].author <<endl <<endl;
      }
   }
   cout << endl << "      ----------      "<<endl;
}

void display()
{
   cout << "\n\n      --Book Store--     " << endl <<endl;
   cout << "1. View available books" << endl;
   cout << "2. Search a book by title or author (Upper Case)" << endl;
```

```
    cout << "3. Add books to a shopping cart" << endl;
    cout << "4. View the contents of the shopping cart" << endl;
    cout << "5. Complete the purchase" << endl;
    cout << "6. Exit" << endl;
    cout << endl << "       --------------------      "<<endl;
}

int main ()
{
    Book books [MAX_BOOKS] =
          {
       {"1. ","A TIME TO KILL", "JOHN GRISHAM", 20.15},
       {"2. ","THE HOUSE OF MIRTH", "EDITH WHARTON", 15.15},
       {"3. ","EAST OF EDEN", "JOHN STEINBECK", 17.65},
       {"4. ","THE SUN ALSO RISES", "ERNEST HEMINGWAY", 10.00},
       {"5. ","NUMBER THE STARS", "LOIS LOWRY", 25.61},
    };
    creditCard creditCard;
    Book cart[MAX_BOOKS];
    int numBooks = 5;
    int cartSize = 0;
    while(true)
          {
       display();
       int choice;
       cout << "Enter your Choice: ";
       cin >> choice;
       cout <<endl <<endl;
       switch (choice)
       {
       case 1:
          availableBooks(books, numBooks);
          break;
       case 2:
          {
             cin.ignore();
             cout << "Enter the title or author's name: ";
             string search;
             getline(cin, search);
             searchBooks(books, numBooks, search);
          }
          break;
       case 3:
          {
             cin.ignore();
             availableBooks(books, numBooks);
             cout << "Enter the index number to add to the cart: ";
```

```
      //cin >> index;
      string input;
      getline(cin, input);
      addToCart(cart, cartSize, books, numBooks, input);
      cout << "\nAdded to the cart" << endl;

   }
   break;
case 4:
   {
    availableBooks(cart, cartSize);
   if(cartSize>0)
                        {
            double cost = 0.0;
            for (int i = 0; i<cartSize; ++i)
                                                    {
            cost += cart[i].price;
            }
         cout << "Total cost: $" << cost << endl;
   }
   }
   break;
case 5:
   {
      if(cartSize>0)
                                  {
         if(Payment(creditCard))
                                        {
            double cost = 0.0;
            for (int i = 0; i<cartSize; ++i)
                                                    {
            cost += cart[i].price;
            }
         cout << "Total cost: $" << cost << endl;
         cout << "Purchase completed. Thank you.\n" << endl;
         cartSize =0;
         }

         else
                                        {
         cout << "Invaild card details. Payment failed." << endl;
         }
      }
      else {
         cout <<"\nCart is empty. Add books to the cart first" <<endl;
      }
```

```
        }
        break;
      case 6:
        cout << "Exited form the Book store." << endl;
        return 0;

      default:
        cout<< "Invaild choice. Please enter a number between  1 to 6";
      }
   }
}
```