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Assigment-1:

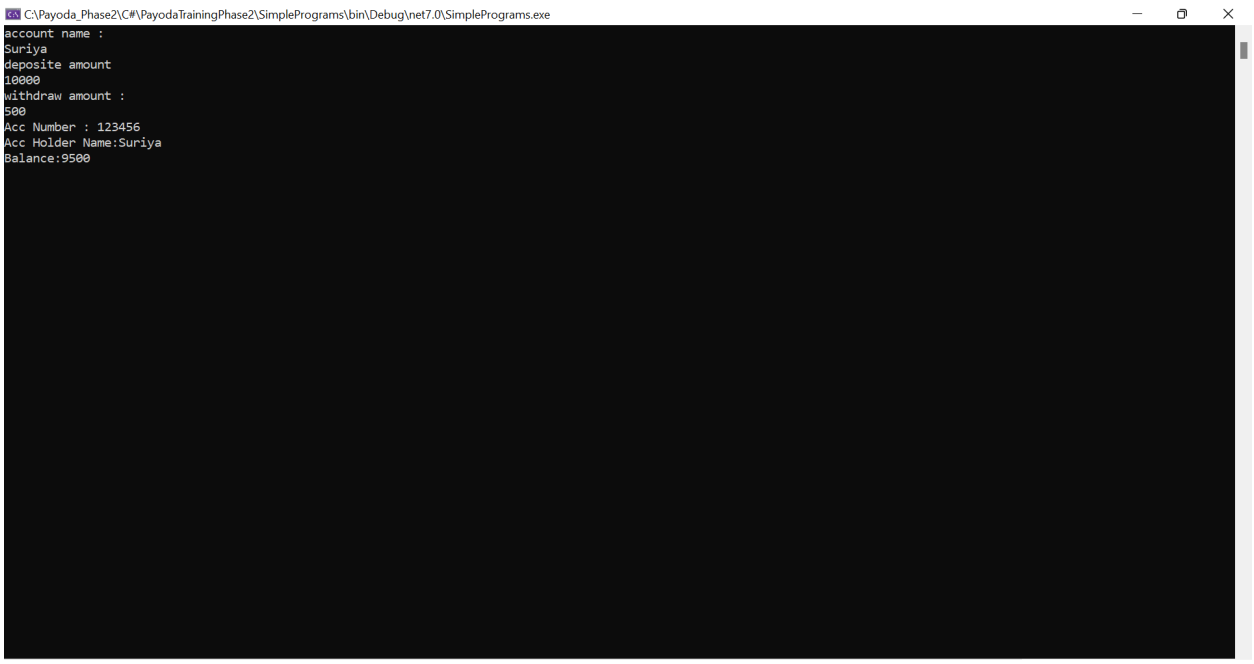
BankAccount.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace SimplePrograms
{
   class BankAccount
   {
      private readonly int acc_number;
      private int balance;
      private string acc_holder_name;

      public BankAccount(string acc_holder_name)
      {
         acc_number = 123456;
         Acc_holder_name = acc_holder_name;
         Balance = 0;

      }

      public int Acc_number => acc_number;

      public int Balance { get => balance; set => balance = value; }
      public string Acc_holder_name { get => acc_holder_name; set => acc_holder_name =
value; }

      public void Deposit(int dep_amount)
      {
         if (dep_amount <= 0)
         {
            Console.WriteLine("inadequate amount");
         }
         else
         {
            Balance = dep_amount + Balance;
```

```
        }
    }
    public void Withdraw(int withdraw_amt)
    {
        if (withdraw_amt <= 0)
        {
            Console.WriteLine("Zero balance");
        }
        else if (Balance >= withdraw_amt)
        {
            Balance = Balance - withdraw_amt;
        }
        else
        {
            Console.WriteLine("please enter amount correctly");
        }
    }
    public void Display()
    {
        Console.WriteLine("Acc Number : " + Acc_number);
        Console.WriteLine("Acc Holder Name:" + Acc_holder_name);
        Console.WriteLine("Balance:" + Balance);

    }
  }
}
```

Program.cs

```
Console.WriteLine("account name : ");
string holder_name = Console.ReadLine();
Console.WriteLine("deposite amount ");
int deposite = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("withdraw amount :  ");
int withdraw = Convert.ToInt32(Console.ReadLine());


BankAccount bankAccount = new BankAccount(holder_name);

bankAccount.Deposit(deposite);
bankAccount.Withdraw(withdraw);
bankAccount.Display();
Console.ReadLine();
```



Assignment-2

Book.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace LibraryManagement
{
    class Book
    {
        private readonly int bookId;
        private string title;
        private string author;
        private bool isAvailable;

        public Book(int bookId, string title, string author, bool isAvailable)
        {
            this.bookId = bookId;
            Title = title;
            Author = author;
            IsAvailable = isAvailable;
        }
```

```
        public string Title { get => title; set => title = value; }
        public string Author { get => author; set => author = value; }
        public bool IsAvailable { get => isAvailable; set => isAvailable = value; }

    }
}
```

Library.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace LibraryManagement
{
    class Library
    {
        Book[] book = new Book[4];
        public Library(Book[] arr)
        {
            book = arr;
        }
        public void BorrowBook(string title)
        {
            int count = 0;
            for (int i = 0; i < book.Length; i++)
            {
                if (book[i].Title.Equals(title))
                {
                    book[i].IsAvailable = false;
                    Console.WriteLine("Borrowed");
                    count++;
                }
            }
            if (count == 0) { Console.WriteLine("Book not Available"); }
        }
        public void ReturnBook(string title)
        {
            for (int i = 0; i < book.Length; i++)
            {
                if (book[i].Title.Equals(title))
```

```
            {
                book[i].IsAvailable = true;
                Console.WriteLine("Returned");
            }
        }

    }
    public void DisplayBookDetails()
    {
        for (int i = 0; i < book.Length; i++)
        {
            Console.WriteLine("Title :" + book[i].Title + " Author :" + book[i].Author + " Availablity " +
book[i].IsAvailable);
        }
    }
  }
}
```

Program.cs

```
using LibraryManagement;
Book[] arr = { new (1, "It end with us", "collen", true), new(2, "It Start with us", "Collen", true), new(3,
"Deep", "collen", true), new(4, "Beauty of ocean", "collen", true) };
Library library = new Library(arr);
int choice = 0;
while (choice != 4)
{
  Console.WriteLine("Choose \n1.Borrow Book\n2.Return Book\n3.Display Book\n4.Exit");
  choice = Convert.ToInt32(Console.ReadLine());
  if (choice == 1)
  {
    Console.WriteLine("Book title: ");
    string title = Console.ReadLine();
    library.BorrowBook(title);
  }
  else if (choice == 2)
  {
    Console.WriteLine("Book need to return: ");
    string title = Console.ReadLine();
    library.ReturnBook(title);
  }
  else if (choice == 3)
  {
    library.DisplayBookDetails();
  }
```

```
    else if (choice == 4)
    {
        break;
    }
}
```