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Task 1:

Create a c# Program for bank account withdraw and deposit

using System;

```
namespace SimpleProgrms
{
    class Program
    {
        static void Main(string[] args)
        {
            int Accountnumber = Convert.ToInt32(Console.ReadLine());
            string AccountHolderName = Console.ReadLine();
            int Depositamt = Convert.ToInt32(Console.ReadLine());
            int Widthdraw = Convert.ToInt32(Console.ReadLine());

            BankAccount bankAccount = new BankAccount(Accountnumber, AccountHolderName);
            bankAccount.Deposit(Depositamt);
            bankAccount.Deposit(Widthdraw);
            bankAccount.PrintAccountDetails();

            Console.ReadLine();
        }
    }
}
```

using System;

using System.Collections.Generic;

using System.Text;

namespace Day4Bank

```
{
    class BankAccount
    {
        readonly int Accountnumber;
        private string AccountHolderName;
        private int Balance=0;

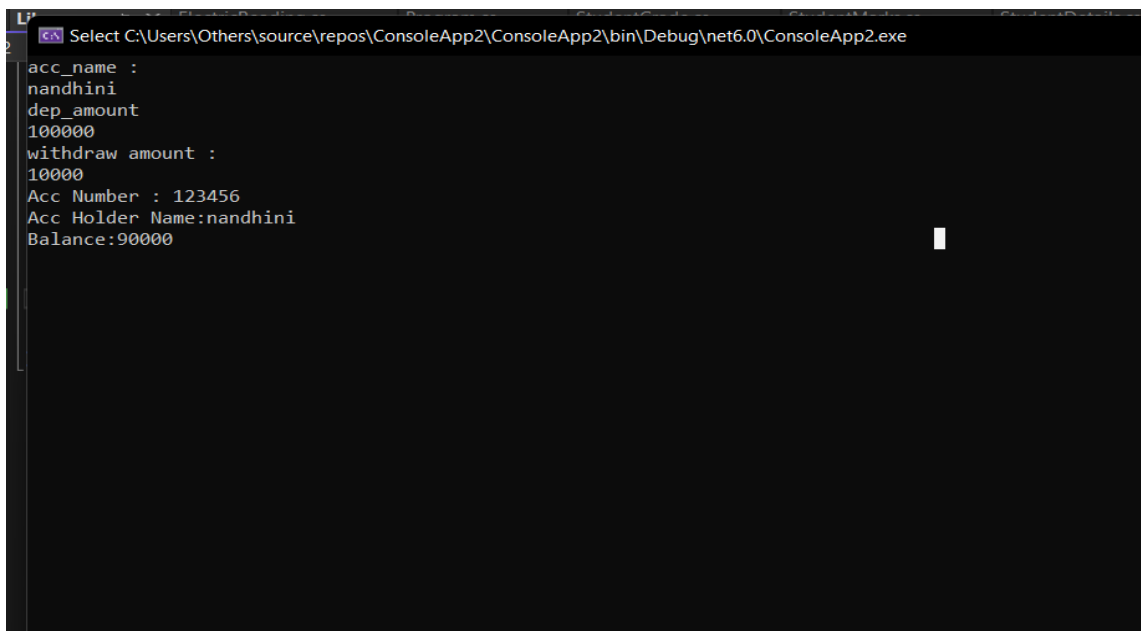
        public BankAccount(int Accountnumber,string AccountHolderName)
        {
            this.AccountHolderName1 = AccountHolderName;
            this.Accountnumber = Accountnumber;
        }

        public string AccountHolderName1 { get => AccountHolderName; set =>
AccountHolderName = value; }
        public int Balance1 { get => Balance; set => Balance = value; }

        public int Deposit(int amt)
        {
            Balance1 += amt;
            return Balance1;
        }
        public int Withdraw(int remamt)
        {
            Balance1 -= remamt;
            return Balance1;
        }
    }
}
```

```
    }  
    public void PrintAccountDetails()  
    {  
        Console.WriteLine("The AccountNumber is :" + Accountnumber + " And the Name is  
:" + AccountHolderName1 + " the balance is :" + Balance1);  
    }  
}  
}
```

Output:



The screenshot shows a Windows command prompt window with the title bar "Select C:\Users\Others\source\repos\ConsoleApp2\ConsoleApp2\bin\Debug\net6.0\ConsoleApp2.exe". The output of the application is as follows:

```
acc_name :  
nandhini  
dep_amount  
100000  
withdraw amount :  
10000  
Acc Number : 123456  
Acc Holder Name:nandhini  
Balance:90000
```

Task 2:

Create a C# program to model a simple Library Management System using classes and objects. Design classes for "Book" and "Library" with the following properties and methods:

```
using System;

namespace LibraryManagement
{
    class Program
    {
        static void Main(string[] args)
        {
            Book[] arr = { new Book(101, "Python", "Nandhini", true), new Book(102, "Java",
"Preethi", true), new Book(103, "C#", "Suriya", true), new Book(104, "C", "Kiruba", false)
};
            Library library = new Library(arr);
            int choice = 0;
            while (choice != 4)
            {
                Console.WriteLine("Choose the option\n1.Borrow Book\n2.Return
Book\n3.Display Books\n4.Exit");
                choice = Convert.ToInt32(Console.ReadLine());
                if (choice == 1)
                {
                    Console.WriteLine("Enter the title of the book to borrow");
                    string title = Console.ReadLine();
                    library.BorrowBook(title);
                }
                else if (choice == 2)
                {
                    Console.WriteLine("Enter the title of the book to return");
                    string title = Console.ReadLine();
                    library.ReturnBook(title);
                }
                else if (choice == 3)
                {
                    library.DisplayBookDetails();
                }
                else if (choice == 4)
                {
                    break;
                }
            }
        }
    }
}

using System;
using System.Collections.Generic;
using System.Text;

namespace LibraryManagement
{
    internal 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);
    }
}
}

using System;
using System.Collections.Generic;
using System.Text;

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

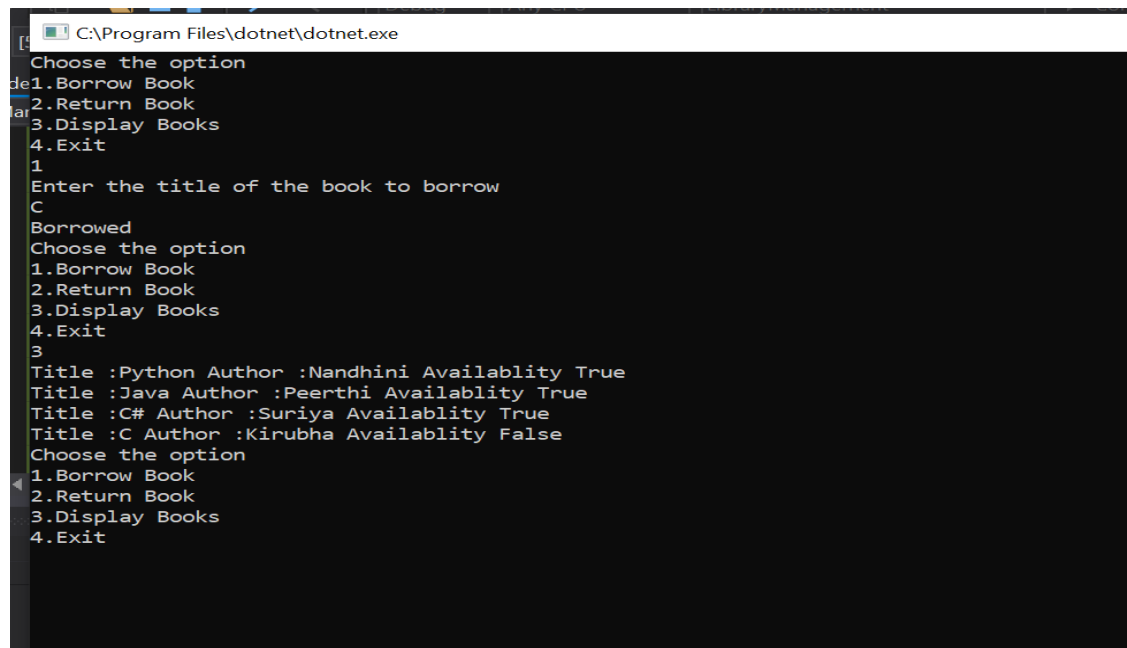
        public Book(int bookId, string title, string author, bool isAvailable)
        {
            this.bookId = bookId;
            Title = title;
            Author = author;
            IsAvailable = isAvailable;
        }

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

```

```
}  
}
```

Output:



```
C:\Program Files\dotnet\dotnet.exe  
Choose the option  
1.Borrow Book  
2.Return Book  
3.Display Books  
4.Exit  
1  
Enter the title of the book to borrow  
C  
Borrowed  
Choose the option  
1.Borrow Book  
2.Return Book  
3.Display Books  
4.Exit  
3  
Title :Python Author :Nandhini Availablity True  
Title :Java Author :Peerthi Availablity True  
Title :C# Author :Suriya Availablity True  
Title :C Author :Kirubha Availablity False  
Choose the option  
1.Borrow Book  
2.Return Book  
3.Display Books  
4.Exit
```