

**UNIVERSITY OF GHANA**  
**COLLEGE OF BASIC AND APPLIED SCIENCES**  
**SCHOOL OF PHYSICAL AND APPLIED SCIENCES**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**DCIT318: PROGRAMMING II**

**ASSIGNMENT 2**

**ID:** 10907327

**DUE DATE:** 20TH JUNE, 2023.

**Q1.** Bank Account

```
using System;

class BankAccount
{
    private string accountNumber;
    private double balance;

    public BankAccount (string accountNumber)
    {
        this.accountNumber = accountNumber;
        balance = 0.00;
    }

    public void Deposit(double amount)
    {
        while (amount == 0)
        {
            Console.WriteLine("Failed Transaction. Deposit amount more than zero(0)");
            return;
        }

        balance += amount;
        Console.WriteLine("An amount of GHC {0}.has been deposited successfully. You have a current balance of GHC {1}.", amount, balance);
    }

    public void Withdraw (double amount)
    {
        while(amount == 0)
        {
            Console.WriteLine("You can't withdraw {0}.", amount);
            return;
        }

        while (amount > balance)
        {
            Console.WriteLine("Your balance is {0}. you can't redraw an an amount more than {0}.", balance);
        }

        balance -= amount;
        Console.WriteLine("Withdrawal of GHC {0}. has been made. New balance is {1}.", amount, balance);
    }
}
```

```
    }

    public double GetBalance()
    {
        return balance;
    }
}
```

## Q2. Employee

```
using System;

class Employee
{
    private string name, designation;
    private double salary;

    public string Name
    {
        get => name;
        set { name = value; }
    }

    public string Designation
    {
        get => designation;
        set { designation = value; }
    }

    public int Salary
    {
        get => (int)salary;
        set { salary = value; }
    }
}
```

## Q3. Student

```
using System;
class Student
{
    private string name;
    private int age;
    private int grade;

    public void SetName(string studentName)
    {
        name = studentName;
    }

    public string GetName()
    {
        return name;
    }

    public void SetAge(int studentAge)
    {
        age = studentAge;
    }

    public int GetAge()
```

```

    {
        return age;
    }

    public void SetGrade(int studentGrade)
    {
        grade = studentGrade;
    }

    public int GetGrade()
    {
        return grade;
    }
}

```

#### Q4. Car

```

using System;

class Car
{
    private string make;
    private string model;
    private int year;

    public string Make
    {
        get => make;
        set => make = value;
    }

    public string Model
    {
        get => model;
        set => model = value;
    }

    public int Year
    {
        get => year;
        set => year = value;
    }
}

```

#### Q4. Car

```

using System;

class LibraryBook
{
    private string title;
    private string author;
    private bool available;

    public LibraryBook(string bookTitle, string bookAuthor)
    {
        title = bookTitle;
        author = bookAuthor;
        available = true;
    }

    public string GetTitle()
    {
        return title;
    }
}

```

```
}  
  
public string GetAuthor()  
{  
    return author;  
}  
  
public bool IsAvailable()  
{  
    return available;  
}  
  
public void SetAvailability(bool bookAvailability)  
{  
    available = bookAvailability;  
}  
  
}
```