

Deadline – Wednesday, October 7, 2020**Create class library “HRMSLib” and write following classes**

1. Write class Date.cs in HRMSLib project with following members:

int _day; int _month; int _year;

Provide following functionality:

Default constructor

Parameterized constructor

Properties: Day (1 -31 allowed also consider leap year),

Month (1 -12 allowed) and

Year (Consider only 20th & 21st century)

string ToString(); override method to return data of object in string format dd/MM/yyyy.

Also provide a static member function that returns difference between two date objects in number of years.

git commit –m “assignment 4.1 completed”

2. Write a class Person.cs in HRMSLib project with following members:

string _name; bool _gender; Date _birth;

string _address;

Provide following functionality:

Default constructor

Parameterized constructor

Properties: Name, Gender, Birth, Address and Age (Read Only)

string ToString(); override method to return data of object in string format.

Hint: Class will contain Date object for birth and Age will be calculated using static method in Date class.

git commit –m “assignment 4.2 completed”

3. Write a enum EmployeeTypes.cs in HRMSLib project with following members:

Trainee, Permanent, Temporary

git commit –m “assignment 4.3 completed”

4. Write a class Employee.cs in HRMSLib project with following members:

int _id; (Auto Generated)

double _salary; double _hra (40% of salary); double _da (10% of salary);

string _designation; enum EmployeeType _empType;

Provide following functionality:

Default constructor

Parameterized constructor

Properties: Id, Salary, Designation, EmployeeType and NetSalary (Read Only & virtual)

string ToString(); override method to return data of object in string format.

Hint: class must be inherited from Person class. Use static count for auto generating id.

Netsalary = Salary + HRA + DA

git commit –m “assignment 4.4 completed”

5. Write a class Salesperson in HRMSLib project with following members:
double _commision ;
Provide following functionality:
Default constructor
Parameterized constructor
Properties: Commision
string ToString(); override method to return data of object in string format.
Hint: class must be inherited from Employee class so that designation is fixed i.e. "Salesperson".
Netsalary = Salary + HRA + DA + Commision
git commit -m "assignment 4.5 completed"
6. Write a class WageEmp (Contract basis employee) in HRMSLib project with following members:
int _hours; int _rate; (Per hour basis)
Provide following functionality:
Default constructor
Parameterized constructor
Properties: Hours, Rate
string ToString(); override method to return data of object in string format.
Hint: class must be inherited from Employee class so that designation is fixed i.e. "Wage".
Netsalary = Hours * Rate
git commit -m "assignment 4.6 completed"
7. Create a console application and use the library "HRMSLib" as private assembly. Console application must be a menu drive program providing facilities of Accepting/Printing Employee details
git commit -m "assignment 4.7 completed"

Deadline – Thursday, October 8, 2020

8. Open existing "HRMSLib" project. Do following changes in this project
a. In Person class add EmailId property (string type) and make changes in ToString(), Constructor methods accordingly.
b. In Employee class add Passcode property (string type), DeptNo property (int type), Hiredate property (Date type) and make changes in ToString(), Constructor methods accordingly.
c. **Optional task:** In Date class overload unary minus operator (-) to calculate difference between two date objects in number of years.
git commit -m "assignment 4.8 completed"
9. Write a class Department in HRMSLib project with following members:
int _deptNo; string _deptName; string _location;
Provide following functionality:
Default constructor
Parameterized constructor
Properties: DeptNo, DeptName, Location
string ToString(); override method to return data of object in string format.
git commit -m "assignment 4.9 completed"
10. Open console application yesterday's project. Do the following changes
a. Provide functionality to Accept/Printing department details
b. Do required changes after completing task 4.8
git commit -m "assignment 4.10 completed"