
Q1 Develop a C++ program to calculate monthly pay for different types of employees (full-time, part-time, and freelancers) in a payroll system using polymorphism.

You need to code only for these questions.

- 1) An abstract base class 'Employee' with private attribute of employee_name and a pure virtual function calculatePay() that calculates the pay based on the employee type.*
- 2) Code for Derived classes:
'FullTimeEmployee' with private member monthly_salary,
'PartTimeEmployee' with private members hourly_rate and worked_hours,
'Freelancer' with private members of pay_per_project and projects_completed.*

Each class overrides the calculatePay() method with specific logic. You need to code for calculatePay() method in each class and desired constructor and destructor.

- 3) A main function where you create an array (or a vector) of pointers to Employee. Populate this array with instances of FullTimeEmployee, PartTimeEmployee, and Freelancer. Then, iterate over this array, calling the calculatePay() method on each Employee.*