

OOP Lab 6 Arrays

Date: 30.9.24

1. An election is contested by 5 candidates. The candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a program to read the ballots and count the votes cast for each candidate using an array variable count. In case a number read is outside the range of 1-5, the ballot should be considered as a spoilt ballot. The program should finally count the number of votes for each candidate along with a count of spoilt votes.
2. Create a class SavingsAccount. Use a static variable annualInterestRate to store the interest rate for all account holders. Each object of the class contains a private instance variable savingsBalance indicating the current amount in the account. Provide method calculateMonthlyInterest to calculate the monthly interest by multiplying the savingsBalance by annualInterestRate divided by 12. This interest should be added to the savingsBalance. Provide a static method modifyInterestRate that sets the annual interest rate to a new value.
Write a program to test the SavingsAccount class. Instantiate three SavingsAccount objects. Set annualInterestRate to 4%, calculate the monthly interest for each account and print the new balance. Now set annualInterestRate to 5% and calculate the next month's interest and print the new balance for all three accounts. You can create an array of three objects.