CS110: Computer Programming Lab Department of CSE IIT, Guwahati

Module 02 Stage 03 Exercise 12

Problem description

A person sets-up a fixed deposit account with Rs 10000 on 1 April 2015. The account will pay the balance back to the person on 31 December 2025. The account is managed as follows:

- 1. Interest is paid on the last day of each month at rate of 1% for each month.
- 2. The bank deducts and pays tax once every term (3 months). The tax is paid from the account at 40% of the earned interest during the term.
- 3. The actual tax payable by the customer is, however, 30% of the earning. The tax authorities, refund the excess tax payment on 31 December each year back into the account. For example, excess tax collected up to 31 March 2018 will be refunded on 31 December 2018.
- 4. All computations are done by dropping the fractions of paise.
- 5. Bank charges an annual account fee in advance of Rs 100. The first fee is collected when account is setup.

Determine the amount the bank will pay the customer on 31 December 2025 if customer does not make any interim withdrawal.