Time : 1 hour   **20 Marks**

A bank offers three types of saving accounts for their customers. The account types and annual interest is given below.

Type	Annual Interest rate
1	4%
2	7%
3	10%

a) Implement a function called calculateAmount() to calculate and return the balance of the account at the end of the year. The account type and the balance at the beginning of the year should be passed as parameters.

   Interest = Initial amount * Annual interest rate / 100
   Balance at the end of the year = Initial Amount + Interest
   Function prototype is given below.
   ```
   double calculateAmount(int type, double initial);
   ```

b) Implement a function called printDetails() to print the amount of the account at the end of the year.

   Function prototype is given below.
   ```
   void printDetails(int type, double initial, double balance);
   ```

c) Implement a function called checkEligibility() to return the customer eligibility (Eligible – 1, Not eligible - 2) for the raffle draw that organized by the bank at the end of the year. The account holders who have minimum of 5000/= in the account at the end of the year are eligible for the raffle draw. The account balance as at end of the year will be passed as parameter for this function.

   Function prototype is given below.
   ```
   int checkEligibility(double balance);
   ```

d) In your main program,
   1. Write two assert statements to test checkEligibility() function.
2. Input account type and the initial amount of **five account holders** and display the calculated amount of each account holder using printDetails() function with their eligibility. To display their eligibility for the raffle draw, use checkEligibility() function.
   Save your program as **ITXXXXXX.c**