

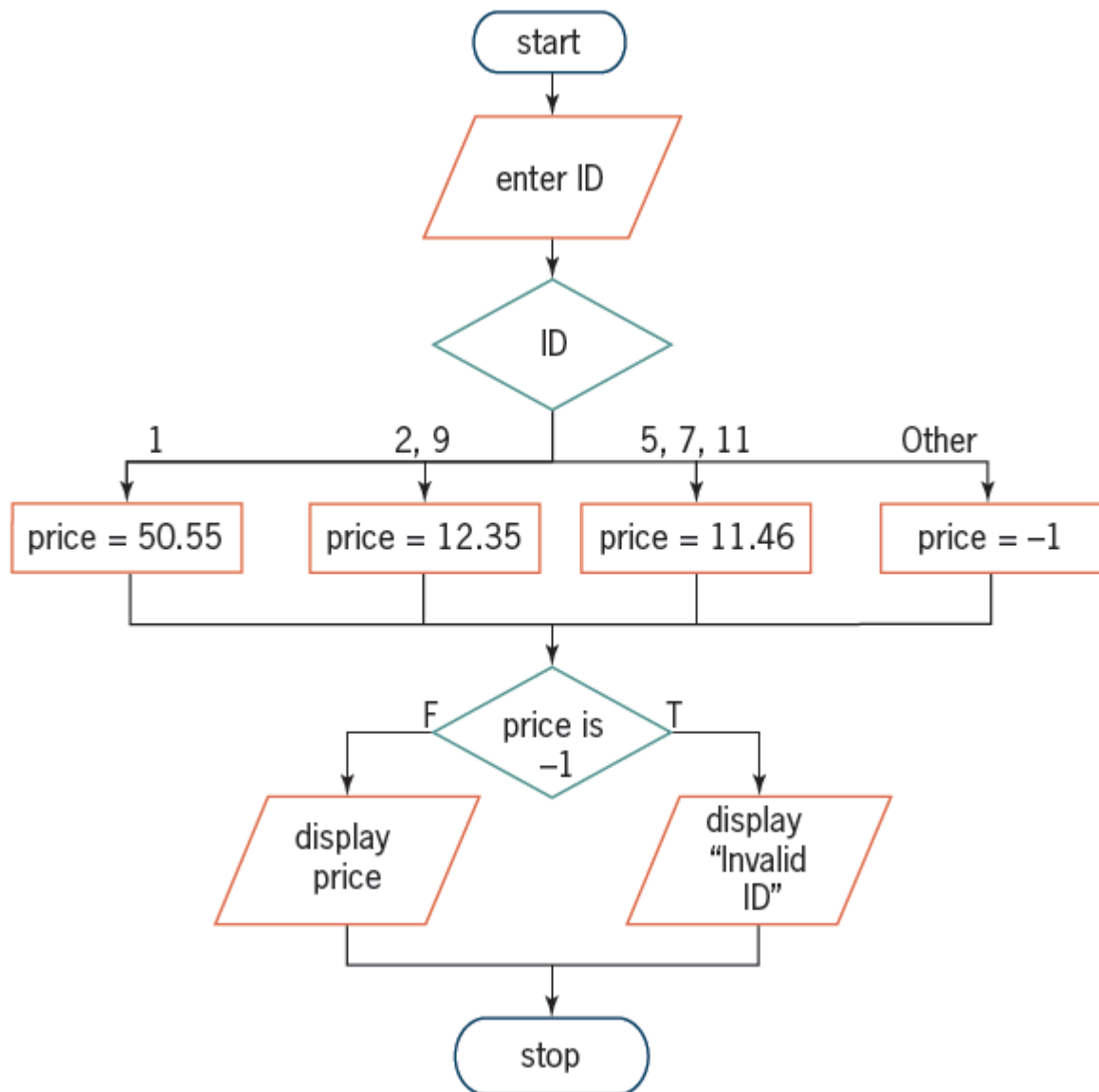
1. Write the code for a multiple-alternative selection structure that displays a name based on the employee code entered by the user. The employee code is stored in an **int** variable named **empCode**. The employee codes and names are show here. If the employee code does not appear in the list, the selection structure should display the “Invalid code” message. Use the shorter form of the if statement.

<u>Code</u>	<u>Name</u>
1	Ali
2	Hameed
3	Hussain
4	Hussain
5	Ammar

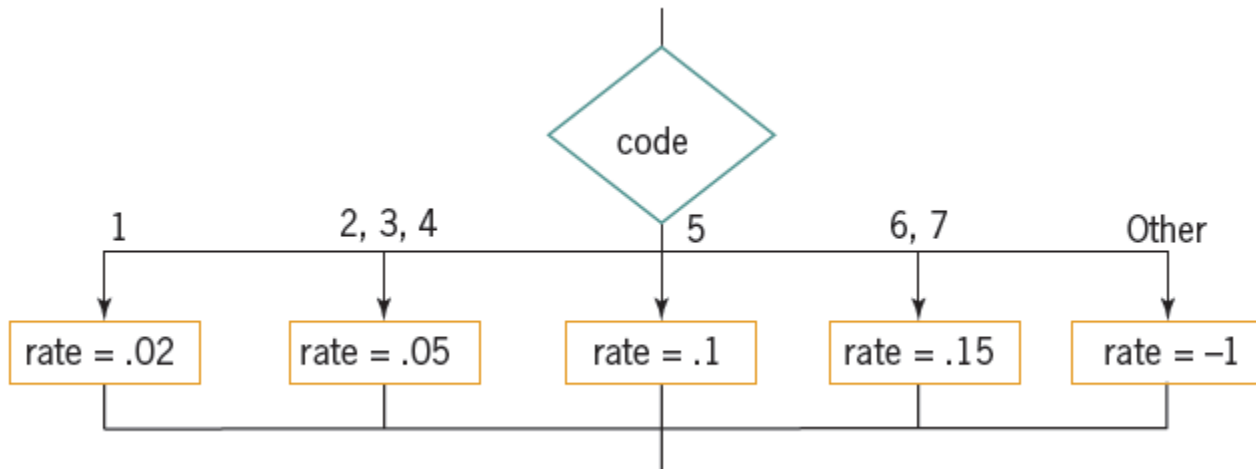
- Rewrite the previous selection structure using the switch statement.
2. Study the flowchart shown in Figure below, and then answer the questions.

### QUESTIONS

1. What will the program display when the ID is the number 11?
2. How can you write the multiple-alternative selection structure using the shorter form of the if statement?
3. How can you write the multiple-alternative selection structure using the switch statement?
4. What changes would you need to make to the code from Question 3 so that each case clause displays the appropriate price and the default clause displays the “Invalid ID” message?



3. Using the switch statement, write the C++ code that corresponds to the partial flowchart shown in Figure below. Use a char variable named **code** and a double variable named **rate**.



- Complete Exercise 3, and then change the switch statement to the multiple- alternative form of the if statement.
4. A program uses a char variable named department and two double variables named salary and raise. The department variable contains one of the following letters (entered in either uppercase or lowercase): A, B, C, or D. Employees in departments A and B are receiving a 2% raise. Employees in department C are receiving a 1.5% raise, and employees in department D are receiving a 3% raise. Using the switch statement, write the C++ code to calculate the appropriate raise amount.
5. A local department store wants a program that displays the number of reward points a customer earns each month. The reward points are based on the customer's membership type and total monthly purchase amount, as shown in Figure below. Write c++ program to solve this problem.

<u>Membership type</u>	<u>Total monthly purchase (\$)</u>	<u>Reward points</u>
Standard	Less than 75	5% of the total monthly purchase
	75–149.99	7.5% of the total monthly purchase
	150 and over	10% of the total monthly purchase
Plus	Less than 150	6% of the total monthly purchase
	150 and over	13% of the total monthly purchase
Premium	Less than 200	4% of the total monthly purchase
	200 and over	15% of the total monthly purchase

6. The C++ code in Figure 6-39 should display one of the four messages listed in the figure. The appropriate message is based on the level entered by the user. Correct the errors in the code.

<u>Level</u>	<u>Message</u>
1 or 2	Bronze
3	Silver
4 or 5	Gold
Other	Invalid ID

```

int level = 0;
cout << "Level (1 through 5): ";
cin >> level;
switch (level)
{
    case 1:
    case 2:
        cout << "Bronze";

    case 3:
        break;
        cout << "Silver";

    case 4:
        cout << "Gold";

    case 5:
        break;

    default:
        cout << "Invalid ID";
}
//end switch

```