1. **Praising a Friend**

   Write a program that asks the user's grade and outputs Very good!, if the grade is at least 90. If not, there should be no output.

2. **Basketball Game**

   Write a program that asks the user to input the scores of two teams in a basketball game after the 4^{th} quarter. The program should output which of the two teams won.

3. **Length Conversion Strikes Back**

   Write a program that first asks the user if he wants to convert either from meters to kilometers, or from kilometers to meters. If the user chooses the first option, the program should ask for the value in meters and display the corresponding value in kilometers. If the user chooses the second option, the program should ask for the value in kilometers and display the corresponding value in meters.

   Note that 1 kilometer is equivalent to 1,000 meters.

4. **Area or Perimeter**

   Write a program that accepts the length and the width of a rectangle (in meters). The program should then ask the user if he or she wants to compute for the area or the perimeter, and then display whichever the user chose.

5. **Reality Show**

   If order to be eligible for a new reality show, you have to be at least 18 years old but not more than 35 years old. Write a program that asks for the user's age and then displays if he or she is eligible or not.

6. **The Party**

   Claudia and Amor hate each other. Both of them are invited to a party. If both of them accept the invitation, there will be chaos (since they are going to see each other). Write a program that asks if Claudia accepts the invitation to the party and if Amor accepts the invitation to the party. The program should display if there will be chaos or not.

7. **Arrange Yourselves According to Height**

   Write a program that asks the user to input the heights of three persons in meters. The program should then display the heights of the three persons in feet, but in ascending order (from smallest to largest). Note that there can be more than one person with the exact same height.

8. **Leap Year**

   A leap year is interesting because February has 29 days during leap years. A leap year is a year that is divisible by 4 but not divisible by 100. An exception to this rule are years divisible by 400, which are automatically leap years. Write a program that accepts the year and then displays if that year is a leap year or not.

9. **LRT Fare Calculator**

   Consider a railway line with 15 stations, numbered from 1 to 15. The fare is computed as follows:
   - ₱ 20.00 base fare for the first three stations (not counting the station where you entered).
   - Additional ₱ 2.50 for every station after that.
   - If you enter and exit in the same station, the fare is ₱ 0.00.

   Write a program that asks the user to input the station number where he or she entered and the station number where he or she exited. The program should display the fare that he or she must pay.

10. **Will You Marry Me?**

    Write a program that asks for the age and sex (M or F) of two people. Next, the program should ask for their current location, which for this problem we will assume to be only either Philippines or USA. The program should display if the two people can marry each other or not. For the two people to be eligible for marriage, they must both be of legal age (at least 18 years old). Furthermore, gay marriage is not allowed in the Philippines, although it is considered legal in the USA.

11. **Triangle Classifier**

    Write a program that accepts the lengths of the three sides of a triangle in meters. The program should classify it into one of the following:

    Equilateral All three sides are of the same length.

    Isosceles Exactly two sides are of the same length.

    Scalene No two sides are of the same length.

    Note that even though modern mathematical definitions of isosceles triangle state that it should have at least two sides of the same length (thus making all equilateral triangles isosceles as well), we will follow the classical definition of an isosceles triangle for the sake of this problem.

12. **Fast Food Chain**

    Consider the following menu for a fast food chain:

	Ala Carte	**Value Meal** (with drinks)
Fried Chicken	₱ 75.00	₱ 85.00
Burger Steak	₱ 40.00	₱ 50.00
Tapsilog	₱ 60.00	₱ 70.00

    Write a program that asks the user for his order. Ask the user if he or she wants just a regular ala carte order, to if he or she wants to make it a value meal. The program should also ask for the age of the customer. Finally, the program should ask for the amount that the user paid. The program should display the change of the customer. Note that senior citizens (those who are at least 60 years old) get a 20% discount.

13. **Dean's Lister**

    Assuming we only have three subjects in the term:

LOGPROG	3 units
INTR-IT	3 units
FITWELL	2 units

    Write a program that accepts the grades of the student for each of those subjects, and then displays the grade point average (GPA) of the student for the term. To compute for the GPA, multiply the grade for each subject with the number of units to get the weighted grade for that subject. Add all the weighted grades and then divide it by the total number of units to get the term GPA.

    If the GPA of the student is at least 3.400, the program should display that the student is a first honor dean's lister. If the GPA of the student is at least 3.000 but less than 3.400, the program display that the student is a second honor dean's lister.

14. **How Old Are You?**

    Write a program that asks for the current date (as an integer assuming the format *mmddyyyy*). You may use the numbers 1–12 to represent the month for convenience. After that, the program should also ask for the birthday of the user (as an integer assuming the format *mmddyyyy*). The program should display how old the user is. For example, if today is September 18, 2015 and the user's birthday is September 29, 1992, then the user is 22 years old.

15. **To buy or not to buy?**

    Help consumers determine whether to buy or not to buy a product given its expiry date. Write a program that will ask the user to enter the current date as an integer assuming the format *mmddyyyy* and the expiry date indicated the product label. If the expiry date is after the current date, display Buy, otherwise display Don't buy.