1. Write a program that accepts three integers as input and determines the largest, smallest, and middle number and prints them in correct order.

For example input: 3, 20, 4 output in order: 3, 4, 20

1. Write a program that reports the contents of a compressed-gas cylinder based on the first letter of the cylinder’s color. The program input is a character representing the observed color of the cylinder: ‘y’ or ‘Y’ for yellow, ‘O’ or ‘o’ for Orange and so on. Cylinder colors and associated contents are as follows:

|  |  |
| --- | --- |
| Orange | Ammonia |
| Brown | Carbon monoxide |
| Yellow | Hydrogen |
| Green | Oxygen |

Your program should respond to input of a letter other than the first letters of the given colors with a message, Contents unknown.

1. The National Earthquake Information Center has asked you to write a program implementing the following decision table to characterize an earthquake based on its Richter scale number.

|  |  |
| --- | --- |
| Richter Scale Number (n) | Characterization |
| N < 5.0 | Little or no damage |
| 5.0 <= n <= 5.5 | Some damage |
| 5.5 <= n < 6.5 | Serious Damage: walls may crack or fail |
| 6.5 <= n < 7.5 | Disaster: houses and building may collapse |
| higher | Catastrophic: most buildings destroyed |

1. Keith’s Sheet Music needs a program to implement its music teacher’s discount policy. The program is to prompt the user to enter the purchase total and to indicate whether the purchaser is a teacher. The store plans to give each customer a printed receipt, so your program is to create a nicely formatted file called receipt.txt. Music teachers receive a 10% discount on their sheet music purchases unless the purchase total is $100 or higher. In that case, the discount is 12%. The discount calculation occurs before addition of the 5% sales tax. Here are two sample outputs – one for a teacher and one for a nonteacher.

Teachers Receipt

Total purchase $122.00

Teacher’s discount (12%) 14.64

Discounted total 107.36

Sales tax (5%) 5.37

Total $112.73

Customer Receipt

Total purchase $24.90

Sales tax (5%) 1.25

Total $26.15