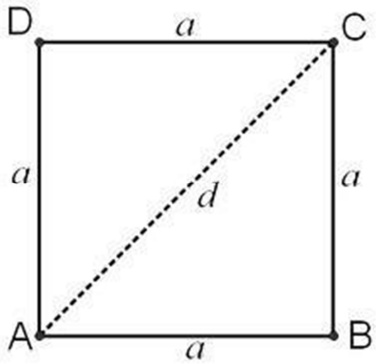
Name: ID: Section:

CSE 115: Practice session: Week 2

1. If a five-digit number is input through the keyboard, write a program to print summation of first and last digit of the number. For example if the number that is given as input is 12398 then the output should be displayed as 9.
2. [**] Suppose the diagonal of a square is *d*. Draw a diagram of a SQUARE and find an equation for the area *A* of the square from its diagonal *d*. Finally, write down a program that will take the length of its diagonal *d* as input and print area of the square. For example if diagonal is 6.0 then the area will be 18.0.



3. If the marks obtained by a student in three different subjects are given as input through the keyboard, find out the total marks and percentage marks obtained by the student. Assume that the maximum marks in each subjects is 100. Show the percentage of marks up to 2 decimal places. Your output should match exactly with the following format:

   Example:
   Enter subject 1 mark: 75.0
   Enter subject 2 mark: 80.0
   Enter subject 3 mark: 90.0
   The total is 75.0+80.0+90.0 = 245
   Average is 81.67

4. Write down a program that will take an English letter as input and will print the next letter in the alphabet. For example, if the user enters **D** the output will be **E**.

CSE 115: Home assignment.

1. If a four-digit number is input through the keyboard, write a program to obtain the product of the first and last digit of this number.

2. Mr. Alam's basic salary is input through the keyboard. His dearness allowance is 40% of the basic salary, and house rent allowance is 20% of basic salary. Write a program to calculate his gross salary (gross salary is the summation of basic salary, dearness allowance and house rent allowance).

3. $y = 2x^3 + x^2 - 7$. Ask the user for value of x. Then compute and print the value of y.

4. Write down a program that will take the length of two items measured in meters and centimeters as input and will print their length difference in meters and centimeters. For example, if the length of one item is 3 meter and 50 centimeter and the length of the other item is 2 meter and 70 centimeter then the difference that you need to display in your program is 0 meter and 80 centimeter.

5. The distance between two cities (in km.) is input through the keyboard. Write a program to convert and print the distance in (i) meters, (ii) feet, (ii) inches and (iv) centimeters. (1 meter = 3.28 feet).

6. Write down a program that will take an English letter as input and will print the letter which comes after N letters in the alphabet. N will also be input to your program. For example, if the user enters **D** and the value of N entered by the user is 3 the output will be **G**.