

ECE160: Foundations of Computer Engineering I

Homework #2 (Spring 2023)

Assigned: February 3, Friday

Due by: **February 10, Friday, 9am**

Instructions:

1. Please follow the “[Submission Guidelines](#)” in the Homework section of the course website to submit your answers (program files) to the class M: drive by the deadline.
2. Please create a subfolder name “hw2” under your “homework” folder and submit your files there. Suggested format for naming your solution files: [hw2-your last name-p#.cpp](#)
For example: [hw2-xing-p1.cpp](#) for problem 1; [hw2-xing-p2.cpp](#) for problem 2
3. Relevant lecture notes: [Lecture #6 & Lecture #7](#)

Problems:

1. Write a program that prints a triangle as follows:

```
A
AB
ABC
ABCD
ABCDE
ABCD
ABC
AB
A
```

2. Write a program that prints the sunset shape as follows:

```
      .
     . .
    . . .
   . @ @ @ .
  @ @ @ @ @
 ..... @ @ @ @ @ .....

```

3. Write a program where you ask a user to enter 6 floating-point numbers between 0 and 30 from the keyboard, and you print them out **one per line** in the order the numbers are entered, then print the numbers in the reverse order, **again one per line**.

For example, the user entered 2.2 3.3 4.4 5.5 6.6 7.7, your output should be:

2.2
3.3
4.4
5.5
6.6
7.7

7.7
6.6
5.5
4.4
3.3
2.2