

# Triangulation

## Due: March 9, 2020 on myCourses by 23:55

Today's lab will explore creating programs that draw triangles.

### PART 1 – Simple ASM Triangle

Using code from Lab 5, write a TASM program that draws a single triangle, of any size and of any type, on the screen. You can select any video mode; your triangle must look like a triangle.

- Call your program lab6.asm

### PART 2 – Triangulation

Optional: If you have access to a Windows computer or a Virtual Machine with Windows, then run the attached triangulation program, as seen in class. Try out some triangulations. Compare the run-times between your computer and a classmate's computer.

Mandatory: What is the Big Oh of the following function:

```
void Delaunay::Triangulate(const vertexSet& vertices, triangleSet& output)
```

- Write your answer in a PDF file called lab6.pdf

HAVE FUN!

### WHAT TO HAND IN

- Part 1
  - Submit lab6.asm. The TA will run it from their account. Your program must be commented and use code from lab5.
- Part 2
  - Submit a screenshot of the running program
  - Submit lab6.pdf. It contains both the answer and the work you did to get the answer.
- You may zip everything into a single file if myCourses gives you problems uploading. Call that file lab6.zip.

### HOW IT WILL BE GRADED

This lab is worth 20 points:

- Part 1 . . . . . 13 points
- Part 2
  - Screenshot . . . . . 2 points
  - Big Oh calculation . . . . . 5 points