**Name:**

**Advanced Programming in C++**

**Lab Exercise 5/9/2024**

In this exercise we are going to write part of an operating system. You will design a Process class. The Process class should have two private members; myPID and myProcessName. You should have the following public methods cloneProcess, createProcess, and destroyProcess. You should also have a constructor, a copy constructor and destructor which are called by createProcess, cloneProcess, and destroyProcess respectively.

When you have completed your process class and tested it, write a Scheduler class and an InterruptedProcesses class which use the Queue and Stack classes respectively.

Your project should have 13 files:

main.cpp

process.h

process.cpp

scheduler.h

scheduler.cpp

interuptProcess.h

interuptProcess.cpp

processList.h

processList.cpp

queue.h

queue.cpp

stack.h

stack.cpp

Write a driver program (aka main) to test these classes. I have provided one *main.cpp*. Submit your source code.