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** ASSIGNMENT #1 **

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** Explanation of shell script: **

// creation of a filepath variable

FILEPATH='/sys/class/gpio'

// free up the necessary ports that will be used, ignore any errors from

// trying to free up a port that is already free

echo 13 > \$FILEPATH/unexport 2>/dev/null

echo 10 > \$FILEPATH/unexport 2>/dev/null

echo 11 > \$FILEPATH/unexport 2>/dev/null

echo 12 > \$FILEPATH/unexport 2>/dev/null

echo 0 > \$FILEPATH/unexport 2>/dev/null

// allocate the 5 necessary gpio ports

echo 13 > \$FILEPATH/export

echo 10 > \$FILEPATH/export

echo 11 > \$FILEPATH/export

echo 12 > \$FILEPATH/export

echo 0 > \$FILEPATH/export

// set up the gpio ports as output ports

echo out > \$FILEPATH/gpio13/direction

echo out > \$FILEPATH/gpio10/direction

echo out > \$FILEPATH/gpio11/direction

echo out > \$FILEPATH/gpio12/direction

echo out > \$FILEPATH/gpio0/direction

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** ASSIGNMENT #2 **

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** Makefile compiling **

user410@localhost:~/lab05/assign2\$ ls

GPIO.cpp GPIO.h main.cpp Makefile

user410@localhost:~/lab05/assign2\$ make

g++ -Wall -c -g main.cpp

g++ -Wall -c -g GPIO.cpp

g++ -Wall -g main.o GPIO.o -o main

user410@localhost:~/lab05/assign2\$ ls

GPIO.cpp GPIO.h GPIO.o main main.cpp main.o Makefile

user410@localhost:~/lab05/assign2\$ make clean

rm *.o

rm main

user410@localhost:~/lab05/assign2\$ ls

GPIO.cpp GPIO.h main.cpp Makefile

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** ASSIGNMENT #3 **

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** Makefile compiling **

user410@localhost:~/lab05/assign3\$ ls

GPIO.cpp GPIO.h Makefile ServoPosition.cpp

user410@localhost:~/lab05/assign3\$ make

g++ -Wall -c -g ServoPosition.cpp

g++ -Wall -c -g GPIO.cpp

g++ -Wall -g ServoPosition.o GPIO.o -o ServoPosition

user410@localhost:~/lab05/assign3\$ ls

GPIO.cpp GPIO.h GPIO.o Makefile ServoPosition ServoPosition.cpp
ServoPosition.o

user410@localhost:~/lab05/assign3\$ make clean

rm *.o

rm ServoPosition

user410@localhost:~/lab05/assign3\$ ls

GPIO.cpp GPIO.h Makefile ServoPosition.cpp

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** ASSIGNMENT #4 **

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** Makefile compiling **

user410@localhost:~/lab05/assign4\$ ls

GPIO.cpp GPIO.h Makefile ServoSpeed.cpp

user410@localhost:~/lab05/assign4\$ make

g++ -Wall -c -g ServoSpeed.cpp

g++ -Wall -c -g GPIO.cpp

g++ -Wall -g ServoSpeed.o GPIO.o -o ServoSpeed

user410@localhost:~/lab05/assign4\$ ls

GPIO.cpp GPIO.h GPIO.o Makefile ServoSpeed ServoSpeed.cpp
 ServoSpeed.o

user410@localhost:~/lab05/assign4\$ make clean

rm *.o

rm ServoSpeed

user410@localhost:~/lab05/assign4\$ ls

GPIO.cpp GPIO.h Makefile ServoSpeed.cpp