//cathal Lawlor – assignment 10

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

int maxpass;

int pass;

int count;

int rdmpasscode;

int srchpass;

int count2;

int digits;

int setpasscode(int maxpass); //prototyping

int orderedpasscodesearch(int ran, int count2);

int finalcode(int ran);

void randompasscodesearch(int ran);

void main()

{

for (int i = 0; i < 4; i++) {

setpasscode(maxpass);

randompasscodesearch(pass);

orderedpasscodesearch(pass, srchpass);

}

finalcode(pass);

randompasscodesearch(pass);

orderedpasscodesearch(pass, srchpass);

}

int setpasscode(int maxpass) { //inputting the passcodes

printf("Enter max password size required : ");

scanf\_s("%d", &maxpass);

long lt = time(NULL);

srand(lt);

pass = rand() % maxpass + 1;

printf("Password is %d\n", pass);

return pass;

}

void randompasscodesearch(int ran) { //trying to find the passcode randomly

long l = time(NULL);

srand(l \* 2);

do {

rdmpasscode = rand();

count++;

} while (rdmpasscode != ran);

printf("Password found with %d attempts.\n", count);

}

int orderedpasscodesearch(int ran) { //ordered search of passcode

while (ran != count2) {

count2++;

}

printf("Password found with %d attemps. \n", count2 + 1);

return count2;

}

int finalcode(int ran) { //testing using my student id num

pass = 456;

printf("Final password is: %d", pass);

return pass;

}

