Homework 5

1. The initialization of sentinel-controlled loops and endfile-controlled loops are the same because they both follow identical syntax with while and for loops. The initialization of sentinel-controlled loops and endfile-controlled loops are different because they exit in different manners . The repetition tests of sentinel-controlled loops and endfile-controlled loops are the same because they aren’t bound by a counting variable . The repetition tests of sentinel-controlled loops and endfile-controlled loops are different because sentinel loops compare values to finish loops, where endfile loops run until the endfile is reached . The update tests of sentinel-controlled loops and endfile-controlled loops are the same because they both move through the inputted values onto the next data value. The update tests of sentinel-controlled loops and endfile-controlled loops are different because sentinel loops are parsing through data where end file loops are parsing through files .
2. int sum, n;

do{

printf(“Enter temperature: “);

scanf(“%d”, &n);

if(n == 275)

break;

sum += n

}while(1);

printf(“%d\n”, sum);

1. #include <stdio.h>

#define SPECIAL\_SLOPE 0.0

int

main(void){

double slope, y2, y1, x2, x1;

printf("Enter 4 numbers separated by spaces.");

printf("\nThe last two numbers cannot be the ");

printf("same, but\nthe program terminates if ");

printf("the first two are.\n");

printf("\nEnter four numbers> ");

//Scans in 4 2 8 4 -> slope is set to .50

scanf("%lf%lf%lf%lf", &y2, &y1, &x2, &x1);

//Scans in 1 4 2 1 -> slope is set to -3

//Scans in 9 3 3 1 -> slope is set to 3

//Scans in -22 10 8 2 -> slope is set to -5.33

//Scans in 3 3 4 5-> slope is set to 0

// cause the loops to end

for (slope = (y2 - y1) / (x2 - x1);

slope != SPECIAL\_SLOPE;

slope = (y2 - y1) / (x2 - x1)) {

printf("Slope is %5.2f.\n", slope);

printf("\nEnter four more numbers> ");

scanf("%lf%lf%lf%lf", &y2, &y1, &x2, &x1);

}

return (0);

}



#include <stdio.h>

#define SPECIAL\_SLOPE 0.0

int main(void){

double slope, y2, y1, x2, x1;

printf(“Enter 4 numbers separated by spaces.”);

printf(“\nThe last two numbers cannot be the “);

printf(“same, but\nthe program terminates if “);

printf(“the first two are.\n”);

printf(“\nEnter four numbers> “);

scanf(“%lf%lf%lf%lf”, &y2, &y1, &x2, &x1);

slope = (y2 – y1) / (x2 – x1);

while(slope != SPECIAL\_SLOPE){

printf(“Slope is %5.2f.\n”, slope);

printf(“\nEnter four more numbers> “);

scanf(“%lf%lf%lf%lf”, &y2, &y1, &x2, &x1);

slope = (y2 – y1) / (x2 – x1);

}

return 0;

}

1. count = 0;

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

scanf(%d”, &x);

if(x == i)

++count;

}

for(i = n; I < max; ++i)

#include<ctype.h>

do{

int n;

printf(“Enter a number: “);

scanf(“%d” &n);

if(n >= ‘0’ || n <= 15)

break;

while(isDigit(n));