**Section 1**

C Language -high level, not object-oriented, compiled

CProgramDevelopment Phases:1)Editing2)Preprocessing3)Compiling4)Linking5)Loading6)Execution

**Sentinel-controlled iteration (sentinel loop)**

int num;

printf("Enter a number(type 0 to quit): \n");

scanf("%d", &num);

while ( num != 0 ) {

printf("%10d%10d%10d\n", num, num\*num, num\*num\*num);

printf("Enter a number(type 0 to quit): \n");

scanf("%d", &num);

}// end while

If your field width is too small, it printsanyway.

printf("%6.2f\n", 3275.6);

The output will be 3275.60

c = sqrt( a \* a + b \* b );

//insert space between number

**void PrintfRecursivly(int number) {**

if (number < 0) {

number \*= -1;

printf("- ");

}

if (number > 10) {

PrintfRecursivly(number / 10);

printf(" ");

}

printf("%d", number % 10); }

#ifndef THEFUNCTIONS\_H

#define THEFUNCTIONS\_H S

#endif

return (double) sum / size;

**void triangle ( int numLines ) {**

int line, column;

for (line = numLines; line > 0; line--) {

for (column = 1; column <= line; column++) {

printf("\*");

} // end for column

printf("\n");

} // end for line

} // end function triangle

Array range from 0 to 29. access grades[30], no syntax error in C.

In C, there's no function to find the size of an array.

char letter[30];

// count the number of vowels in the array

int i, count = 0;

for (i = 0;i < 30; i++) {

switch (letter[i]) {

case 'a': case 'e': case 'i': case 'o': case 'u':

case 'A': case 'E': case 'I': case 'O': case 'U':

count++;

break;

default:

} // end switch

} // end for

**Section 2**

Segmentation fault: assign array element outsize of bound

// C not do array bound checking //while print work for unknown data