**Assignment #4**

**PART-1 [50 points] Nested Loops**

You are asked to write an ARM assembly program, **nestedloop.s,** to implement the same task as the following C program.

int i = 1;

int j = 0;

int x = 0;

int main(){

for( ; i<10; i+=2){

for( j = i; j<10; j++){

x += i + j;

}

}

return x;

}

**PART-2 [50 points] Arrays**

In this part, you are asked to write an ARM assembly program **array.s** to implement the same task as the following C program.

int a[10];

int b[10];

int i = 1;

int sum = 0;

int main(){

for(; i<10; i++){

a[i] = i;

b[i] = i<<2;

if(b[i] % 8 == 0)

b[i] = a[i/2];

sum += a[i] + b[i];

}

return sum;

}