

Introductory Programming UESTC1005

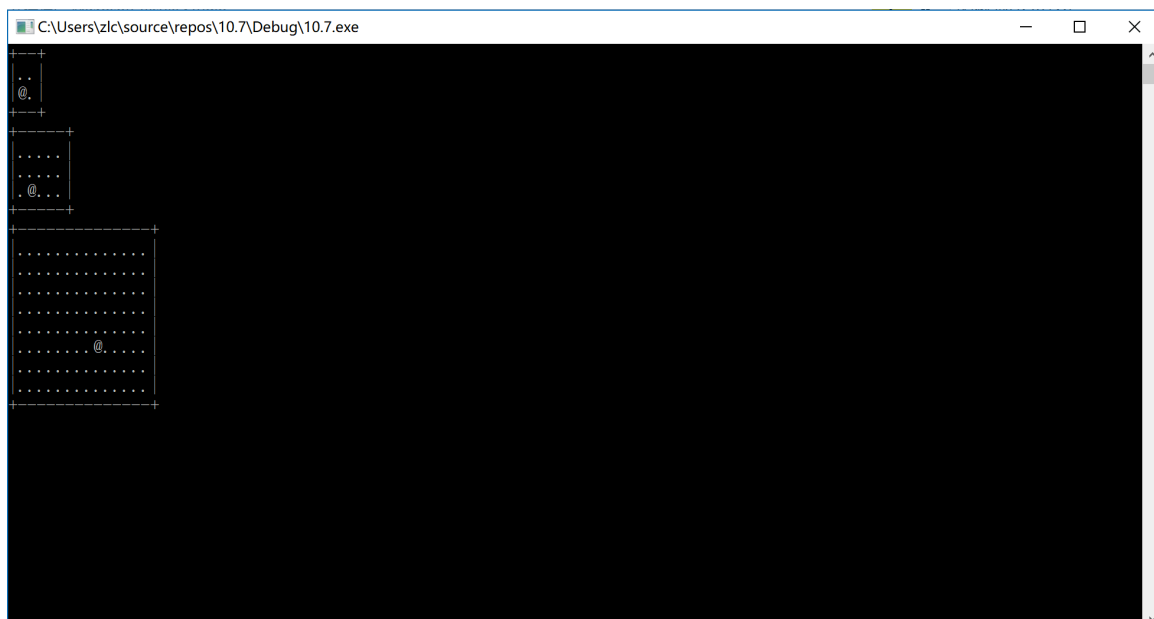
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You will need to complete the demonstration of this week lab and submit this report into BB (it will be added into your portfolio of work).

Exercise 8: for Loops

Task_A: Follow the instructions in Week 10 Lab manual and past your screen short of your result here.




Task_B: Please attach your source code here.

```
#define _CRT_SECURE_NO_WARNINGS
#include<stdio.h>
int horizontal(int x);
int without(int y);
int with(int z);
int drawRoom(int a,int b, int c, int d);
int horizontal(int a) {
    int x;
    printf("+");
    for (x=0; x<a; x++) {
        printf("-");
    }
    printf("+\n");
    return
}
int without(int a) {
    int y;
    printf("|");
    for (y = 0; y <a; y++) {
        printf(".");
    }
    printf("|\\n");
    return
}
int with(int c,int a) {
    int z;
    printf("|");
    for (z = 0; z <c; z++) {
        printf(".");
    }
    printf("@");
    for (z = c; z <a-1; z++) {
        printf(".");
    }
    printf("|\\n");
    return
}
int drawRoom(int a, int b, int c, int d) {
    int i;
    {horizontal(a);
    }
    for (i= 0; i <d; i++) {
        without(a);
    }
    {
        with(c, a);
    }
    for (i = d+1; i <b; i++) {
        without(a);
    }
    {horizontal(a);
    }
    return
}
int main() {
    drawRoom(2, 2, 0, 1);
    drawRoom(5, 3, 1, 2);
    drawRoom(14, 8, 8, 5);
    getchar();
    return
}
```

Exercise 9: Arrays

Task_A: Follow the instructions in Week 10 Lab manual and past your screen short of your result here.



```
选择C:\Users\zlc\source\repos\11.7 (2) \Debug\11.7 (2) .exe
0
1
1
2
3
5
8
13
21
34
when n=10, it is 34
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
610
987
1597
2584
```



```
选择C:\Users\zlc\source\repos\11.7 (2) \Debug\11.7 (2) .exe
1597
2584
4181
when n=20, it is 4181
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
610
987
1597
2584
4181
6765
10946
17711
28657
46368
75025
```

```
选择C:\Users\zlc\source\repos\11.7 ( 2 ) \Debug\11.7 ( 2 ) .exe
28657
46368
75025
121393
196418
317811
514229
832040
1346269
2178309
3524578
5702887
9227465
14930352
24157817
39088169
63245986
102334155
165580141
267914296
433494437
701408733
1134903170
1836311903
-1323752223
512559680
-811192543
when n=50, it is -811192543
```

Task_B: Please attach your source code here.

```
#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>
void fibonacci(int array[], int size);
int main(void)
{
    int array[50] = {0, 1};
    fibonacci(array, 10);
    " when n=10, it is %d\n "
    fibonacci(array, 20);
    " when n=20, it is %d\n "
    fibonacci(array, 50);
    " when n=50, it is %d\n "
    getchar();
    getchar();
}
void fibonacci(int array[], int size) {
    int i;
    for (i = 2; i < size; i++) {
        array[i] = array[i - 1] + array[i - 2];
    }
    for (i = 0; i < size; i++) {
        printf(" %d\n ", array[i]);
    }
}
```