Loop/Repetition Statements

Lecture 4 Assignment

1.

```
Start here X   as1.c X   as2.c X   *as3.c X   as4.c X   as5.c X
1        #include <stdio.h>
2        int main(void)
3      □ {
4          int i;
5          i = 1;
6      □   while (i <= 128) {
7          printf("%d ", i);
8          i *= 2;
9          }
10         return 0;
11     └ }
12
13       //Output is: 1 2 4 8 16 32 64 128
14
```

```
C:\Users\Hp\Documents\as1.exe
1 2 4 8 16 32 64 128
Process returned 0 (0x0)    execution time : 2.649 s
Press any key to continue.
```

2.

```
Start here X  as1.c X  as2.c X  *as3.c X  as4.c X  as5.c X
1        #include <stdio.h>
2        int main(void)
3      □ {
4          int i;
5              i = 0;
6      □       while (i < 10) {
7              printf("%d ", i);
8              i ++;
9          //Output is: 0 1 2 3 4 5 6 7 8 9
10         }
11           printf("\n");
12
13           for (i = 0; i < 10; i++)
14            printf("%d ", i);
15             printf("\n");
16
17         //Output is: 0 1 2 3 4 5 6 7 8 9
18
19           do {
20                 i++;
21           }
22           while (i < 10);
23           printf("%d ", i);
24
25       //Output is: 11
26
27           return 0;
28       }
29
```

```
C:\Users\Hp\Documents\as2.exe
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
11
Process returned 0 (0x0)    execution time : 0.017 s
Press any key to continue.
```

3.

```c
#include <stdio.h>


int main() {
    int i;


    for(i = 1; i <= 128; i*=2) { //Arrange the Update into i multiplied by 2
        printf("%d ", i);
    }

    return 0;
}
```

```
C:\Users\Hp\Documents\as3.exe

1 2 4 8 16 32 64 128
Process returned 0 (0x0)    execution time : 0.013 s
Press any key to continue.
```

4.

```c
#include<stdio.h>
int main() {
    int a, b;
    a = 1;

    for (b = 0; b <= 10; ++b) {
        if (b == 0)
            a = 1;
        else
            a *= 2;
        printf("\n%2d    %8d  ", b, a);
    }
    return 0;
}
```

```
C:\Users\Hp\Documents\as4.exe

0          1
1          2
2          4
3          8
4         16
5         32
6         64
7        128
8        256
9        512
10      1024
Process returned 0 (0x0)    execution time : 0.015 s
Press any key to continue.
```

5.

Start here ☒ | as1.c ☒ | as2.c ☒ | as3.c ☒ | as4.c ☒ | as5.c ☒

```c
#include<stdio.h>
int main(){
    int i,noofdays;
    int first;
    printf("enter no of days in a month:\n");
    scanf("%d",&noofdays);
    printf("enter starting day of the week:\n");
    scanf("%d",&first);

    if (noofdays >= 28 && noofdays <= 31 ){

        for(i=1;i<first;i++)
            printf("   |");
        for(i=1;i<=noofdays;i++){
            printf("%3d",i);
            if((first+i-1)%7==0)
                printf("\n");}
    }

     else {
         printf("Invalid Number");
     }

    return 0;
}
```

RESTRICTIONS:

```
C:\Users\Hp\Documents\as5.exe
enter no of days in a month:
32
enter starting day of the week:
4
Invalid Number
Process returned 0 (0x0)   execution time : 3.637 s
Press any key to continue.
```

```
C:\Users\Hp\Documents\as5.exe
enter no of days in a month:
28
enter starting day of the week:
5
            1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28
Process returned 0 (0x0)   execution time : 16.307 s
Press any key to continue.
```

Github link: https://github.com/elipancarl/CMSC21.git