Operators in C
Lecture 2 Assignments

1.

```c
/***  CELIS, KRISTINA | ASSIGNMENT 2 | as1  ***/

#include <stdio.h>

int main(void)
{
    /* VARIABLES */
    int number, digit1, digit2;                    // declares the ff variables as integers

    /* USER INPUT */
    printf("Enter a two-digit number (i.e. 17): ");
    scanf("%d", &number);                          // will read the user's input and point it to the 'number' variable

    /* CALCULATIONS */
    // used modulo and division operators to get the remainder from each corresponding places
    digit1 = number % 10;                          // 'ones' digit
    digit2 = (number / 10) % 10;                   // 'tens' digit

    /* OUTPUT */
    printf("Reverse: %d%d", digit1, digit2);       // displays the reversed number

    return 0;
}
```

```
Enter a two-digit number (i.e. 17): 23
Reverse: 32
PS C:\Users\Kristina\Desktop\ACADS\CMSC 21\source codes>
```

2.

```c
/***  CELIS, KRISTINA | ASSIGNMENT 2 | as2  ***/

#include <stdio.h>

int main(void)
{
    /* VARIABLES */
    int number, digit1, digit2, digit3;                    // declares the ff variables as integers

    /* USER INPUT */
    printf("Enter a two-digit number (i.e. 123): ");
    scanf("%d", &number);                                  // will read the user's input and point it to the 'number' variable

    /* CALCULATIONS */
    // used modulo and division operators to get the remainder from each corresponding places
    digit1 = number % 10;                                  // 'ones' digit
    digit2 = (number / 10) % 10;                           // 'tens' digit
    digit3 = (number / 100) % 10;                          // 'hundreds' digit

    /* OUTPUT */
    printf("Reverse: %d%d%d", digit1, digit2, digit3);     // displays the reversed number

    return 0;
}
```

```
Enter a two-digit number (i.e. 123): 567
Reverse: 765
PS C:\Users\Kristina\Desktop\ACADS\CMSC 21\source codes>
```

3. Expected Output:

```c
#include <stdio.h>
int main (void){
    int i, j, k;

    i = 3; j = 4; k = 5;
    printf("%d", i < j || ++j < k);

    return 0;
}
```

→ `1`

```c
#include <stdio.h>
int main (void){
    int i, j, k;

    i = 7; j = 8; k = 9;
    printf("%d",i - 7 && j++ < k);

    return 0;
}
```

→ `0`

```c
#include <stdio.h>
int main (void){
    int i, j, k;

    i = 7; j = 8; k = 9;
    printf("%d", (i = j) || (j == k));
    printf("%d %d %d", i, j, k);

    return 0;
}
```

→ `18 8 9`

→

```
1
8 8 9
```

Output if we add a '\n' after '%d' in line 6

```c
#include <stdio.h>
int main (void){
    int i, j, k;

    i = j = k = 1;
    printf("%d", ++i || ++j && ++k);
    printf("%d %d %d", i, j, k);

    return 0;
}
```

→ `12 1 1`

→

```
1
2 1 1
```

Output if we add a '\n' after '%d' in line 6