

Operators in C

Lecture 2 Assignments

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1. Code the following:
 - a. Prompt the user to enter a two-digit number
 - b. Display the number with the digits reversed

```

1 //CMSC 21 Assignment 2 Number 1//
2
3 //Library//
4 #include <stdio.h>
5
6 //Main function for the program//
7 int main(void)
8 {
9
10     //Declaring the variables//
11     int num1, num2;
12
13     //Printing and scanning the input values//
14     printf("Enter a two-digit number: ");
15     scanf("%d%d", &num1, &num2);
16     /*The first entered number will be assigned to num1 and the second
17     number to num2*/
18
19     //Printing the output//
20     printf("Reversed number: %d%d", num2, num1);
21     /*The program would print the last number first before the first number
22     because of how the variables are ordered outside the string.*/
23
24     return 0;
25 }
```

```

C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments\CMSC21\Lecture2>gcc as1.c
C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments\CMSC21\Lecture2>a
Enter a two-digit number: 12
Reversed number: 21
C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments\CMSC21\Lecture2>
```

2. Extend the code in item 1, such that it reverses a 3-digit number.

```

1 //CMSC 21 Assignment 2 Number 2//
2
3 //Library//
4 #include <stdio.h>
5
6 //Main function for the program//
7 int main(void)
8 {
9
10     //Declaring the variables//
11     int num1, num2, num3;
12
13     //Printing and scanning the input values//
14     printf("Enter a three-digit number: ");
15     scanf("%d%d%d", &num1, &num2, &num3);
16     /*The first entered number will be assigned to num1, the second
17     number to num2 and the third to num3*/
18
19     printf("Reversed number: %d%d%d", num3, num2, num1);
20     /*num3 will be printed first, followed by num2 and last is the num1
21     variables thus printing out the reversed digit */
22
23     return 0;
24
25 }
```

```

C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments\CMSC21\Lecture2>a
Enter a three-digit number: 789
Reversed number: 987
C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments\CMSC21\Lecture2>
```

3. Provide the output of the following codes, given that i, j, and k are integer variables.

a) i = 3; j = 4; k = 5;
printf("%d", i < j || ++j < k);
= 1

b) i = 7; j = 8; k = 9;
printf("%d", i - 7 && j++ < k);
= 0

c) i = 7; j = 8; k = 9;
printf("%d", (i = j) || (j == k));
printf("%d %d %d", i, j, k);
= 18 8 9

d) i = j = k = 1;
printf("%d", ++i || ++j && ++k);
printf("%d %d %d", i, j, k);
= 12 1 1

```
C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments\lec2-as3.c - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
ganit_lab2.c as2.c as1.c lec2-as3.c
1 #include <stdio.h>
2
3 int main(void)
4 {
5     int i, j, k;
6
7     i = 3;
8     j = 4;
9     k = 5;
10    printf("%d", i < j || ++j < k);
11
12    i = 7;
13    j = 8;
14    k = 9;
15    printf("%d", i - 7 && j++ < k);
16
17    i = 7;
18    j = 8;
19    k = 9;
20    printf("%d", (i = j) || (j == k));
21    printf("%d %d %d", i, j, k);
22
23    i = j = k = 1;
24    printf("%d", ++i || ++j && ++k);
25    printf("%d %d %d", i, j, k);
26
27    return 0;
28 }
29
```

```
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C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments>lec2-as3.c
C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments>a
1018 8 912 1 1
C:\Users\Zyrex\Documents\UPV COM-SCI - 1 - 2nd SEM\CMSC 21\Assignments>_
```