Carl Benedict L. Elipan

Operators in C

Lecture 2 Assignments

1. Code the following:

    a. Prompt the user to enter a two-digit number

    b. Display the number with the digits reversed

    Example:

    Please enter a 2-digit number: 75

    Reverse: 57

t here | Cmsc21.c | *as1.c | as2.c | as3.c

```c
#include <stdio.h>

int main(void){
    int input, remainder, result, divided; //Declaring varaibles an integers to make the result in whole number and consistent

    printf("Enter the 2 digit number: ");
    scanf("%d",&input); //Input asking number

    remainder = (input % 10) * 10; //Manipulating the number from modulo 10 times 10 + divided number
    divided = input / 10;
    result = divided + remainder;

    printf("Reversed digit: %d", result); //display result

}
```

```
Enter the 2 digit number: 69
Reversed digit: 96
Process returned 0 (0x0)   execution time : 12.654 s
Press any key to continue.
```

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

Example:

Please enter a 3-digit number: 123

Reverse: 321

here | Cmsc21.c | as1.c | *as2.c | as3.c

```c
#include <stdio.h>

int main(void){
    int input, ones, tens, hundreds, result; //    Declaring variables to be used since its three digit divide parts into regions
    printf("Enter the 3 digit number: ");
    scanf("%d",&input); //input asking number

    ones = input %10;  /*Manipulating the number formulas modulo in each regions
                         then divided result is multiplied by 100 and 10 and sum up all*/
    tens = ((input/10)%10);
    hundreds = input/100;
    result = (ones*100)+(tens*10)+hundreds;

    printf("Reversed digit: %d", result); //display reverse
}
```

```
C:\Users\Hp\Desktop\CMSC21\as2.exe
Enter the 3 digit number: 169
Reversed digit: 961
Process returned 0 (0x0)   execution time : 6.123 s
Press any key to continue.
```

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);

b) i = 7; j = 8; k = 9;

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

c) i = 7; j = 8; k = 9;

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

printf("%d %d %d", i, j, k);

d) i = j = k = 1;

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

printf("%d %d %d", i, j, k);

Start here | Cmsc21.c | as1.c | as2.c | as3.c

```c
#include <stdio.h>

int main(void){
    int i, j, k;
    i=3, j=4, k=5; //a
    printf("a) %d\n\n", i<j || ++j<k);

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

    i = 7; j = 8; k = 9; //c
    printf("c):%d\n", (i = j) || (j == k));
    printf("c_2)%d %d %d\n\n", i, j, k);

    i = j = k = 1; //d
    printf("d) %d\n", ++i || ++j && ++k);
    printf("d_2) %d %d %d\n", i, j, k);
}
```

```
C:\Users\Hp\Desktop\CMSC21\as3.exe
a) 1

b) 0

c):1
c_2)8 8 9

d) 1
d_2) 2 1 1

Process returned 0 (0x0)   execution time : 10.076 s
Press any key to continue.
```