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Operators in C

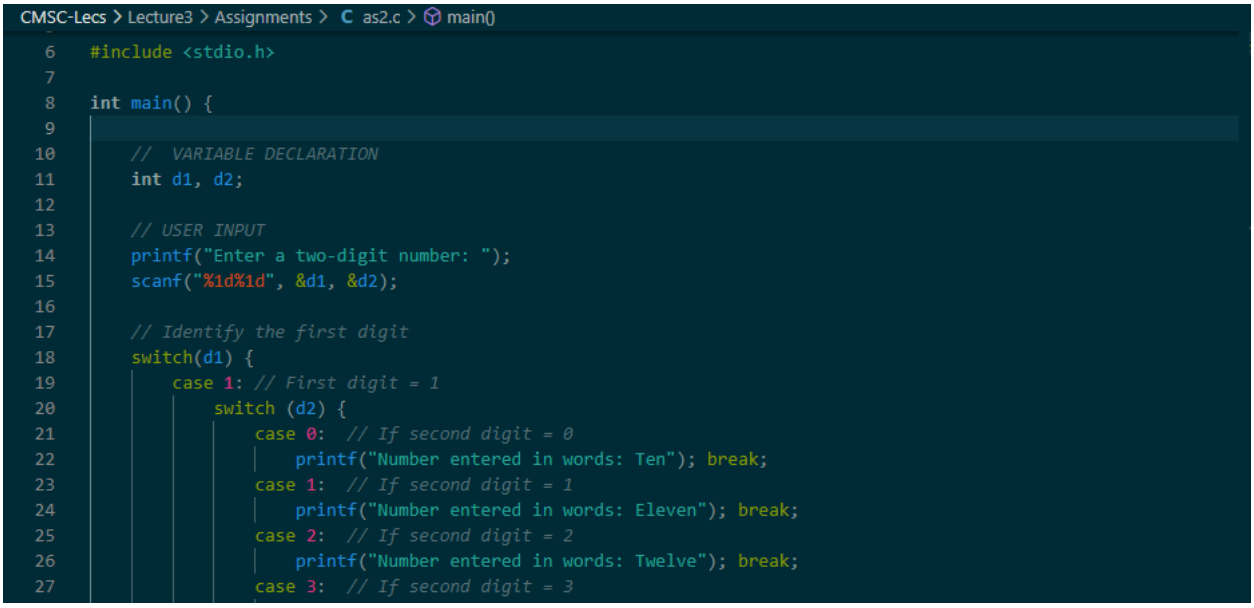
Lecture 1 Assignments

1.

```c
#include <stdio.h>
#include <stdbool.h>

int main() {

    //  VARIABLE DECLARATION
    int age;
    bool teenager;

    // USER INPUT
    printf("Enter age: ");
    scanf("%d", &age);

    // If-else condition: Prints 1 if teenager is true, else 0 if false
    (age >= 13 && age <=19) ? (teenager = true) : (teenager = false) ;

    //  RESULT STATEMENT
    printf("%d years old is a teenager. %s.", age, teenager ? "True" : "False");

    return 0;
}
```

```
2
PS D:\Pan\UPV\1 - Second Sem\CMSC 21\C Project\CMSC 21\Lab\Ferrer_lab3> cd "d:\Pan\UPV\1 - Second Sem\CMSC 21\C Project\CMSC 21\
CMSC-Lecs\Lecture3\Assignments\" ; if ($?) { gcc as1.c     as1 } ; if ($?) { .\as1 }
Enter age: 17
17 years old is a teenager. True.
PS D:\Pan\UPV\1 - Second Sem\CMSC 21\C Project\CMSC 21\CMSC-Lecs\Lecture3\Assignments>
```

2.



```c
#include <stdio.h>

int main() {

    //  VARIABLE DECLARATION
    int d1, d2;

    // USER INPUT
    printf("Enter a two-digit number: ");
    scanf("%1d%1d", &d1, &d2);

    // Identify the first digit
    switch(d1) {
        case 1: // First digit = 1
            switch (d2) {
                case 0:  // If second digit = 0
                    printf("Number entered in words: Ten"); break;
                case 1:  // If second digit = 1
                    printf("Number entered in words: Eleven"); break;
                case 2:  // If second digit = 2
                    printf("Number entered in words: Twelve"); break;
                case 3:  // If second digit = 3
```

```
                printf("Number entered in words: Thirteen"); break;
            case 4:  // If second digit = 4
                printf("Number entered in words: Fourteen"); break;
            case 5:  // If second digit = 5
                printf("Number entered in words: Fifteen"); break;
            case 6:  // If second digit = 6
                printf("Number entered in words: Sixteen"); break;
            case 7:  // If second digit = 7
                printf("Number entered in words: Seventeen"); break;
            case 8:  // If second digit = 8
                printf("Number entered in words: Eighteen"); break;
            case 9:  // If second digit = 9
                printf("Number entered in words: Nineteen"); break;
        }
        break;
    case 2: // First digit = 2
        printf("Number entered in words: Twenty"); break;
    case 3: // First digit = 3
        printf("Number entered in words: Thirty"); break;
    case 4: // First digit = 4
        printf("Number entered in words: Forty"); break;
    case 5: // First digit = 5
        printf("Number entered in words: Fifty"); break;
    case 6: // First digit = 6
        printf("Number entered in words: Sixty"); break;
    case 7: // First digit = 7
        printf("Number entered in words: Seventy"); break;
    case 8: // First digit = 8
        printf("Number entered in words: Eighty"); break;
    case 9: // First digit = 9
        printf("Number entered in words: Ninty"); break;
}
if (d1 != 1) {  // In order to avoid printing if user-input is from ten to nineteen
    switch (d2) { // Identify the first digit
        case 1: printf("-one"); break;
        case 2: printf("-two"); break;
        case 3: printf("-three"); break;
        case 4: printf("-four"); break;
        case 5: printf("-five"); break;
        case 6: printf("-six"); break;
        case 7: printf("-seven"); break;
        case 8: printf("-eight"); break;
        case 9: printf("-nine"); break;
    }
}
return 0;
}
```

```
roject\CMSC 21\CMSC-Lecs\Lecture3\Assignments\" ; if ($?) { gcc as2.c    as2 } ; if ($?) { .\as2 }
Enter a two-digit number: 25
Number entered in words: Twenty-five
PS D:\Pan\UPV\1 - Second Sem\CMSC 21\C Project\CMSC 21\CMSC-Lecs\Lecture3\Assignments> cd "d:\Pan\UPV\1 - Second Sem\CMSC 21\C P
roject\CMSC 21\CMSC-Lecs\Lecture3\Assignments\" ; if ($?) { gcc as2.c    as2 } ; if ($?) { .\as2 }
Enter a two-digit number: 92
Number entered in words: Ninty-two
PS D:\Pan\UPV\1 - Second Sem\CMSC 21\C Project\CMSC 21\CMSC-Lecs\Lecture3\Assignments>
```