

Judelle Clareese E. Gaza

CMSC 21 - 1

i.

```
1  //Judelle Gaza
2
3  #include <stdio.h>
4  #include <stdbool.h>
5
6  void main(){
7      //Declaring Variables
8      bool teenager;
9      int age;
10
11     //Asks and scans for user input
12     printf("Input age: ");
13     scanf("%d", &age);
14
15     /*utilizing ternary operators to assign a bool value to variable teenager
16     if int var age is greater than or equal to 13 AND is less than or equal */
17     teenager = (age >= 13 && age <= 19);
18     printf("%s", teenager ? "TRUE" : "FALSE");
19 }
```

PS C:\Users\ACER> .\as1 }	PS C:\Users\ACER> .\as1 }
Input age: 18	Input age: 20
TRUE	FALSE

ii.

```
1 //JudeLLe Gaza
2
3 #include <stdio.h>
4
5 int main(void){
6     // Declaring variable num as Integer
7     int num;
8
9     // Asks and scans for user input, and storing value into variable num
10    printf("Input two-digit number: ");
11    scanf("%d", &num);
12
13    // Outputs the input number in its word form
14    printf("Input is ");
15
16    // Take the tens digit by dividing by 10
17    switch (num/10) {
18        // 10 - 19
19        case 1:
20            switch (num%10) {
21                case 0: printf("ten."); break;
22                case 1: printf("eleven."); break;
23                case 2: printf("twelve."); break;
24                case 3: printf("thirteen."); break;
25                case 4: printf("fourteen."); break;
26                case 5: printf("fifteen."); break;
27                case 6: printf("sixteen."); break;
28                case 7: printf("seventeen."); break;
29                case 8: printf("eighteen."); break;
30                case 9: printf("nineteen."); break;
31            }
32            return 0;
33
34        // 20 - 90
35        case 2: printf("twenty"); break;
36        case 3: printf("thirty"); break;
37        case 4: printf("forty"); break;
38        case 5: printf("fifty"); break;
39        case 6: printf("sixty"); break;
40        case 7: printf("seventy"); break;
41        case 8: printf("eighty"); break;
42        case 9: printf("ninety"); break;
43
44        // invalid input
45        default:
46            printf("Invalid input! Please input a two-digit positive integer. Try again.");
47            return 0;
48    }
49
50    // Take the ones digit by using modulo 10
51    switch (num%10) {
52        case 1: printf("-one"); break;
53        case 2: printf("-two"); break;
54        case 3: printf("-three"); break;
55        case 4: printf("-four"); break;
56        case 5: printf("-five"); break;
57        case 6: printf("-six"); break;
58        case 7: printf("-seven"); break;
59        case 8: printf("-eight"); break;
60        case 9: printf("-nine"); break;
61    }
62    printf(".");
63
64    return 0;
65 }
```

```
PS C:\Users\ACER> cd "c:\Users\ACER\Documents"
.\as2 }
```

```
Input two-digit number: 21
Input is twenty-one.
```

```
PS C:\Users\ACER> cd "c:\Users\ACER\Documents"
.\as2 }
```

```
Input two-digit number: 12
Input is twelve.
```