

Selection Statements Lecture 3 Assignments

1.) The following if statement is unnecessarily complicated. Simplify it as much as possible

```
Start here X as1.c X as2.c X
1  #include<stdio.h>
2      //1 is true and 0 is False//
3  int main(){
4      int age, teenager;
5      printf("Enter age: ");
6      scanf("%d", &age);
7      if (age >= 13 && age <= 19){
8          teenager = 1;
9      }
10     else{
11         teenager = 0;
12     }
13     printf("%d", teenager);
14     return 0;
15 }
16
```

"C:\Users\Hp\Desktop\Lecture 3\as1.exe"

Enter age: 25
0
Process returned 0 (0x0) execution time : 8.546 s
Press any key to continue.

2. Write a C program that does the following:

Enter a two-digit number: 25

Number entered in words: twenty-five

```
Start here X as1.c X as2.c X
1  #include <stdio.h> // directive preprocessing
2
3  int main(void) //called type of function
4  {
5      int num1, num2;
6
7      printf("Enter 2-digit number ");
8      scanf("%d%d", &num1, &num2); // using specified integers first and second digit
9
10     printf("You have entered: ");
11
12     // print word for the first digit
13     switch (num1)
14     {
15         case 1:
16             // special case for numbers between 11-19
17             switch (num2)
18             {
19                 case 0:
20                     printf("ten");
21                     return 0;
22                 case 1:
23                     printf("eleven");
24                     return 0;
25                 case 2:
26                     printf("twelve");
27                     return 0;
28                 case 3:
29                     printf("thirteen");
30                     return 0;
31                 case 4:
32                     printf("fourteen");
```

| Start here X | as1.c X | as2.c X | Start here X | as1.c X | as2.c X |
|--------------|------------------------------------|---------|--------------|--|---------|
| 55 | break; | | 79 | case 1: | |
| 56 | case 4: | | 80 | printf("-one"); | |
| 57 | printf("forty"); | | 81 | break; | |
| 58 | break; | | 82 | case 2: | |
| 59 | case 5: | | 83 | printf("-two"); | |
| 60 | printf("fifty"); | | 84 | break; | |
| 61 | break; | | 85 | case 3: | |
| 62 | case 6: | | 86 | printf("-three"); | |
| 63 | printf("sixty"); | | 87 | break; | |
| 64 | break; | | 88 | case 4: | |
| 65 | case 7: | | 89 | printf("-four"); | |
| 66 | printf("seventy"); | | 90 | break; | |
| 67 | break; | | 91 | case 5: | |
| 68 | case 8: | | 92 | printf("-five"); | |
| 69 | printf("eighty"); | | 93 | break; | |
| 70 | break; | | 94 | case 6: | |
| 71 | case 9: | | 95 | printf("-six"); | |
| 72 | printf("ninety"); | | 96 | break; | |
| 73 | break; | | 97 | case 7: | |
| 74 | } | | 98 | printf("-seven"); | |
| 75 | | | 99 | break; | |
| 76 | // print word for the second digit | | 100 | case 8: | |
| 77 | switch (num2) | | 101 | printf("-eight"); | |
| 78 | { | | 102 | break; | |
| 79 | case 1: | | 103 | case 9: | |
| 80 | printf("-one"); | | 104 | printf("-nine"); | |
| 81 | break; | | 105 | break; | |
| 82 | case 2: | | 106 | } | |
| 83 | printf("-two"); | | 107 | | |
| 84 | break; | | 108 | return 0; //return value to end the function | |
| 85 | case 3: | | 109 | | |
| 86 | printf("-three"); | | 110 | } | |

```
"C:\Users\Hp\Desktop\Lecture 3\as2.exe"
Enter 2-digit number 25
You have entered: twenty-five
Process returned 0 (0x0)   execution time : 3.012 s
Press any key to continue.
```