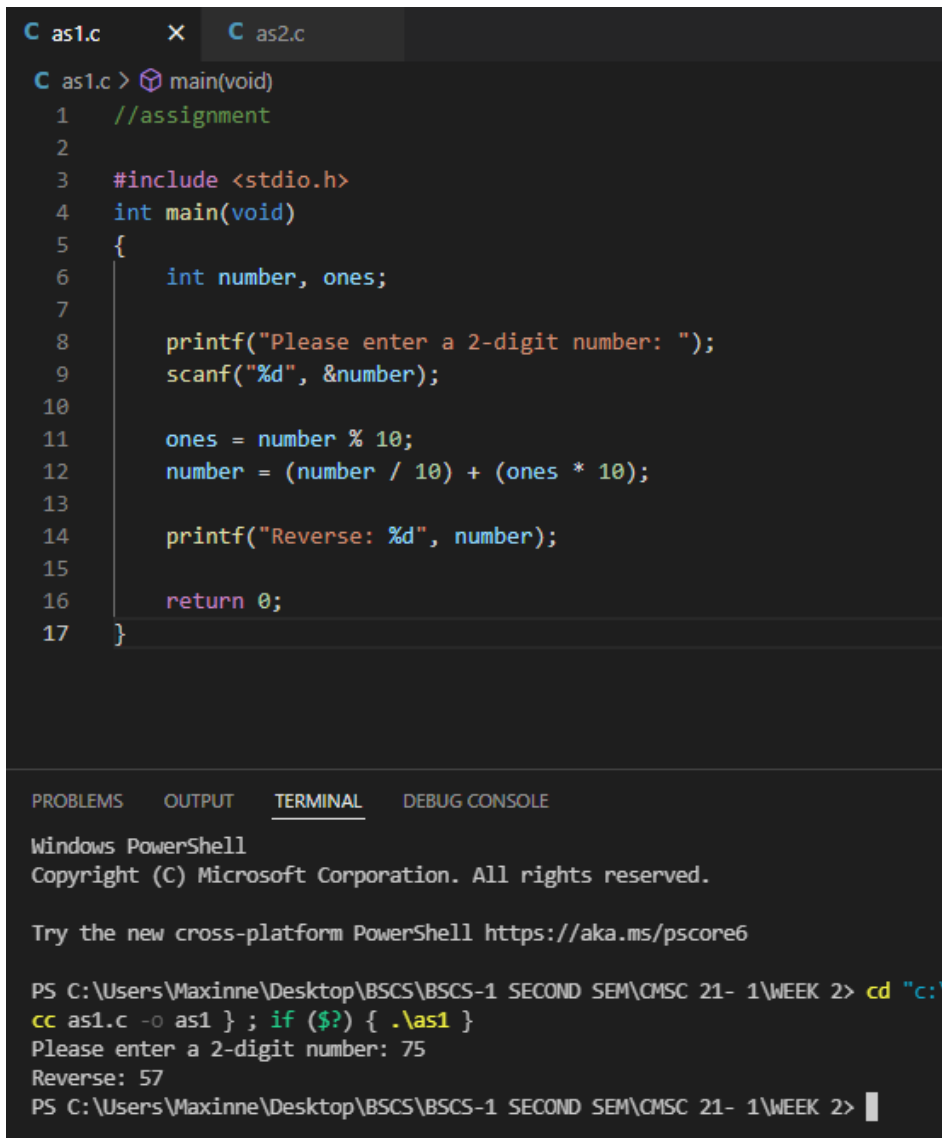


Operators in C

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



```
C as1.c X C as2.c
C as1.c > main(void)
1 //assignment
2
3 #include <stdio.h>
4 int main(void)
5 {
6     int number, ones;
7
8     printf("Please enter a 2-digit number: ");
9     scanf("%d", &number);
10
11     ones = number % 10;
12     number = (number / 10) + (ones * 10);
13
14     printf("Reverse: %d", number);
15
16     return 0;
17 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>

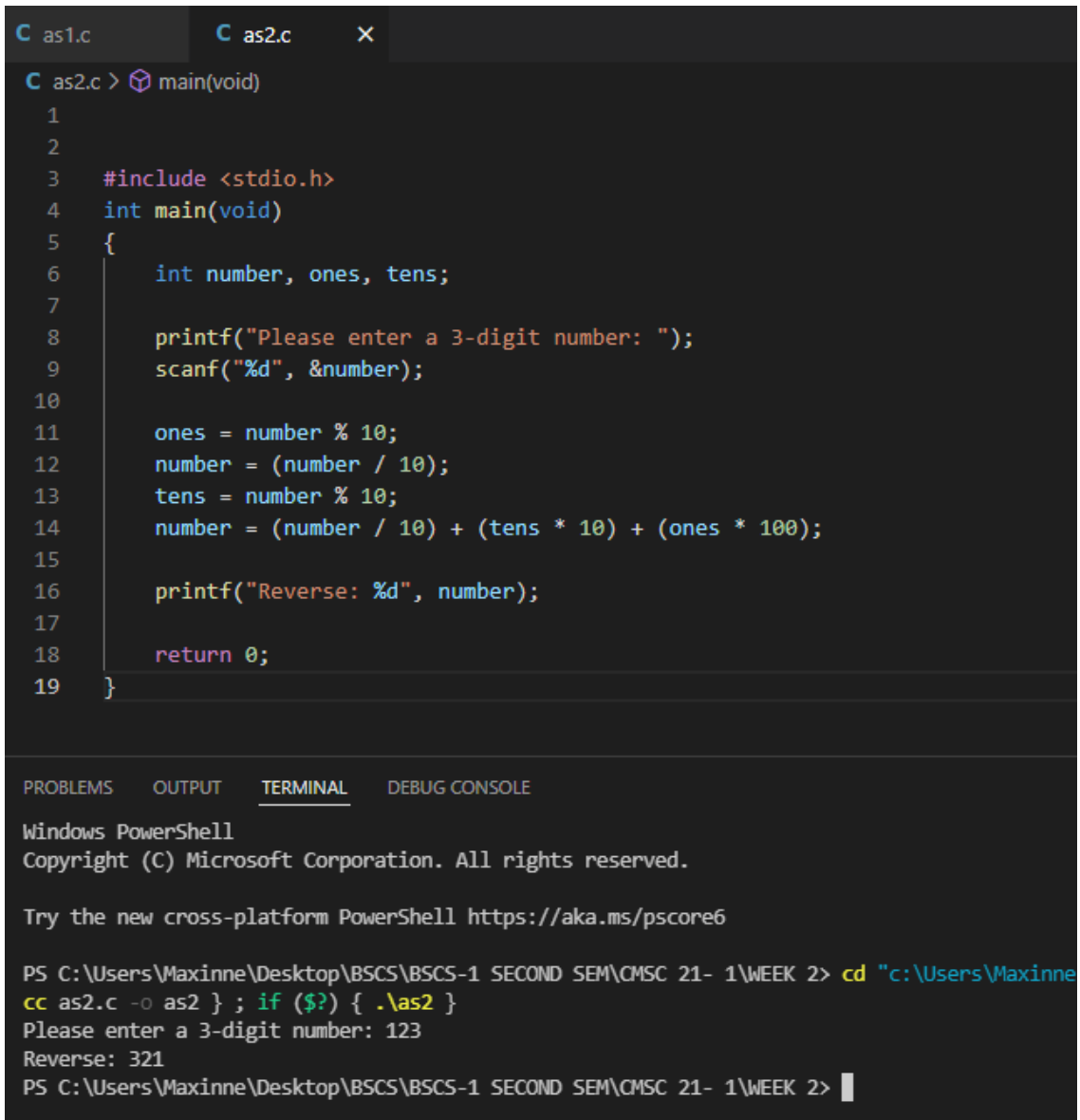
PS C:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2> cd "c:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2" & gcc as1.c -o as1 ; if (\$?) { .\as1 }

Please enter a 2-digit number: 75

Reverse: 57

PS C:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2> |

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



The image shows a code editor with two tabs: 'as1.c' and 'as2.c'. The 'as2.c' tab is active, displaying the following C code:

```
1
2
3  #include <stdio.h>
4  int main(void)
5  {
6      int number, ones, tens;
7
8      printf("Please enter a 3-digit number: ");
9      scanf("%d", &number);
10
11     ones = number % 10;
12     number = (number / 10);
13     tens = number % 10;
14     number = (number / 10) + (tens * 10) + (ones * 100);
15
16     printf("Reverse: %d", number);
17
18     return 0;
19 }
```

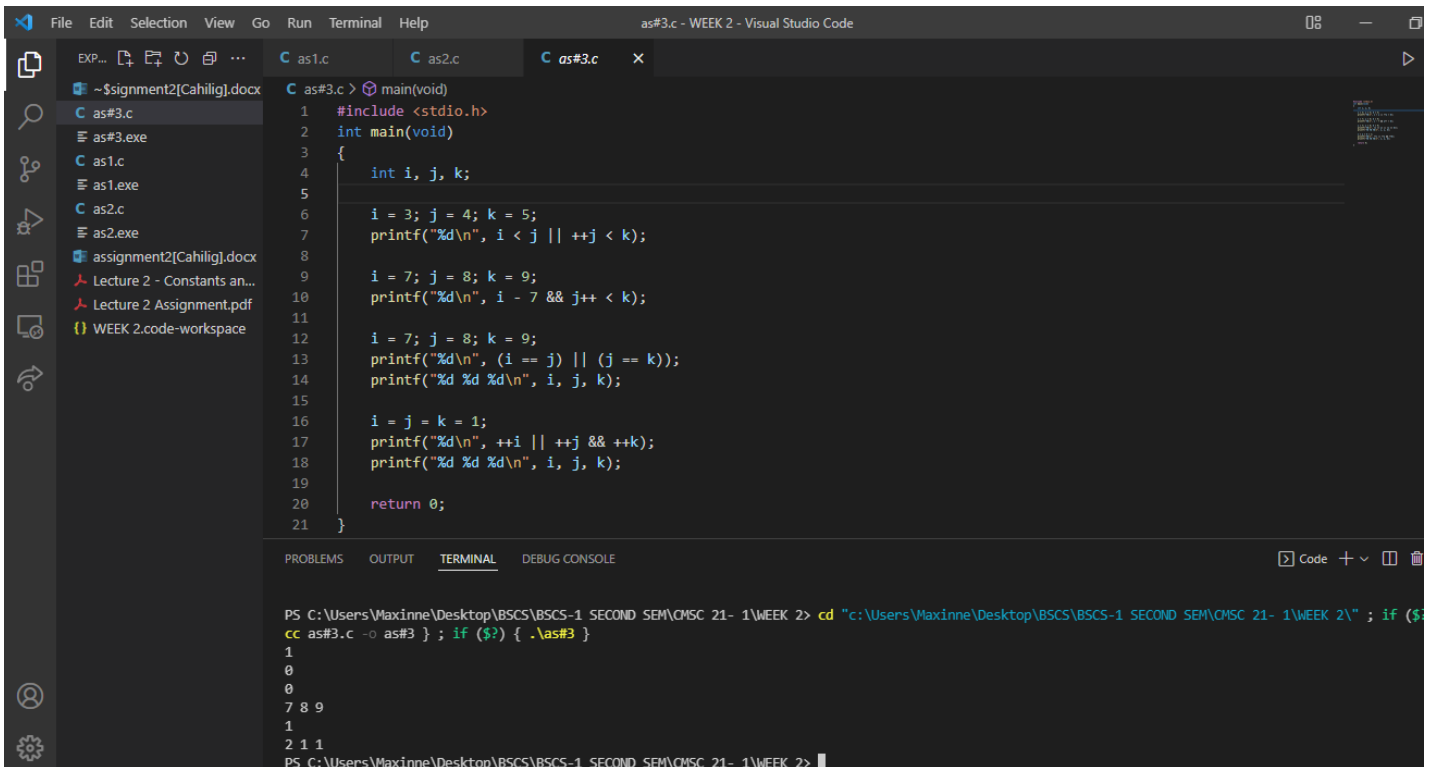
Below the code editor is a terminal window with the following output:

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2> cd "c:\Users\Maxinne
cc as2.c -o as2 } ; if ($?) { .\as2 }
Please enter a 3-digit number: 123
Reverse: 321
PS C:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2> |
```

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



The screenshot shows the Visual Studio Code editor with a C program named `as#3.c` open. The program defines a `main` function that performs several operations on integer variables `i`, `j`, and `k`. The code is as follows:

```
1 #include <stdio.h>
2 int main(void)
3 {
4     int i, j, k;
5
6     i = 3; j = 4; k = 5;
7     printf("%d\n", i < j || ++j < k);
8
9     i = 7; j = 8; k = 9;
10    printf("%d\n", i - 7 && j++ < k);
11
12    i = 7; j = 8; k = 9;
13    printf("%d\n", (i == j) || (j == k));
14    printf("%d %d %d\n", i, j, k);
15
16    i = j = k = 1;
17    printf("%d\n", ++i || ++j && ++k);
18    printf("%d %d %d\n", i, j, k);
19
20    return 0;
21 }
```

The terminal window at the bottom shows the command to compile and run the program:

```
PS C:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2> cd "c:\Users\Maxinne\Desktop\BSCS\BSCS-1 SECOND SEM\CMSC 21- 1\WEEK 2\" ; if ($?) { gcc as#3.c -o as#3 } ; if ($?) { .\as#3 }
```

The output of the program is displayed in the terminal:

```
1
0
0
7 8 9
1
2 1 1
```