

1.

```
1  #include <stdio.h>
2  #include <string.h>
3
4  // FUNCTION TO REVERSE STRING
5  void string_reverse(char *inp)
6  {
7      int i, j, len, temp; // i to iterate from the start of string, j to iterate from the end of the string,
8
9      len = strlen(inp);
10
11     j = len - 1; // index of the end of the string
12     for(i = 0; i < j; i++)
13     {
14         temp = inp[i]; // temp equal to the first character of inp
15         inp[i] = inp[j]; // inp[i] = the last character of inp
16         inp[j] = temp; // inp[j] = first character of inp
17         j--;
18     }
19 }
20
21
22
23 int main(void)
24 {
25     char number[3];
26     printf("Enter a 2-digit number here: ");
27     fgets(number, 3, stdin);
28
29     printf("You entered: %s\n", number);
30     string_reverse(number);
31     printf("Reverse: %s", number);
32
33     return 0;
34 }
```

```
Enter a 2-digit number here: 91
You entered: 91
Reverse: 19
PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files>
```

2.

```

1  #include <stdio.h>
2  #include <string.h>
3
4  // FUNCTION TO REVERSE STRING
5  void string_reverse(char *inp)
6  {
7      int i, j, len, temp; // i to iterate from the start of string, j to iterate from the end of the string,
8
9      len = strlen(inp);
10
11      j = len - 1; // index of the end of the string
12      for(i = 0; i < j; i++)
13      {
14          temp = inp[i]; // temp equal to the first character of inp
15          inp[i] = inp[j]; // inp[i] = the last character of inp
16          inp[j] = temp; // inp[j] = first character of inp
17          j--;
18      }
19  }
20
21
22
23
24 int main(void)
25 {
26     char number[4];
27     printf("Enter a 3-digit number here: ");
28     fgets(number, 4, stdin);
29
30     printf("You entered: %s\n", number);
31     string_reverse(number);
32     printf("Reverse: %s", number);
33
34     return 0;
35 }

```

```

Enter a 3-digit number here: 102
You entered: 102
Reverse: 201
PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files>

```

3.

A)

```
C scratch.c > main(void)
1  #include <stdio.h>
2
3  int main(void)
4  {
5
6      int i = 3;
7      int j = 4;
8      int k = 5;
9
10     printf("Output: %d", i < j || ++j < k);
11
12     return 0 ;
13
14 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

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PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files> cd "c:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files" & gcc -o scratch } ; if (\$?) { .\scratch }

Output: 1

PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files>

B)

```
C scratch.c > main(void)
1  #include <stdio.h>
2
3  int main(void)
4  {
5
6      int i = 7;
7      int j = 8;
8      int k = 9;
9
10     printf("Output: %d", i - 7 && j++ < k);
11
12     return 0 ;
13 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

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Output: 0

PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files>

C)

```
1  #include <stdio.h>
2
3  int main(void)
4  {
5
6      int i = 7;
7      int j = 8;
8      int k = 9;
9
10     printf("Output 1: %d\n", (i = j) || (j == k));
11     printf("Output 2: %d %d %d", i, j, k);
12
13     return 0 ;
14 }
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

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Output 1: 1  
Output 2: 8 8 9  
PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files>

D)

```

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

```

PROBLEMS **1** OUTPUT DEBUG CONSOLE TERMINAL

Windows PowerShell

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-o scratch } ; if (\$?) { .\scratch }

Output 1: 1

Output 2: 2 1 1

PS C:\Users\ASUS\Documents\Jobert\School\First Year\CMSC 21\C Files>