

CMSC 21 – 1

#1

The screenshot shows a C++ IDE with a project named "UPV 1.2\CMSC 21\lecture 2\as1.c". The code in the editor is as follows:

```
1 #include <stdio.h>
2
3 int main(void){
4
5     int digit1, digit2, rev;
6
7     printf("Please enter a 2-digit number:");
8     scanf("%d%d", &digit1, &digit2);
9
10    digit2 *= 10;
11    rev = digit1 + digit2;
12
13    printf("Reverse: %d", rev);
14 }
```

The output window shows the following text:

```
Please enter a 2-digit number:27
Reverse: 72
-----
Process exited after 5.17 seconds with return value 11
Press any key to continue . . .
```

The compilation results window shows the following information:

```
Compilation results...
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\barra\OneDrive\Documents\UPV 1.2\CMSC 21\lecture 2\as1.exe
- Output Size: 128.1015625 KiB
- Compilation Time: 0.64s
```

#2

The screenshot shows a C++ IDE with a project named "UPV 1.2\CMSC 21\lecture 2\as2.c". The code in the editor is as follows:

```
1 #include <stdio.h>
2
3 int main(void){
4
5     int d1, d2, d3, rev;
6
7     printf("Please insert a 3-digit number:");
8     scanf("%d%d%d", &d1, &d2, &d3);
9
10    d3 *= 100;
11    d2 *= 10;
12    rev = d3 + d2 + d1;
13
14    printf("Reverse: %d", rev);
15 }
```

The output window shows the following text:

```
Please insert a 3-digit number:478
Reverse: 874
-----
Process exited after 3.047 seconds with return value 12
Press any key to continue . . .
```

The compilation results window shows the following information:

```
Compilation results...
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\barra\OneDrive\Documents\UPV 1.2\CMSC 21\lecture 2\as2.exe
- Output Size: 128.1015625 KiB
- Compilation Time: 0.67s
```

#3

```
1 #include <stdio.h>
2
3 int main(void){
4     int i, j, k;
5
6     i = 3; j = 4; k = 5;
7     printf("a.) %d \n", i < j || ++j < k);
8
9
10    i = 7; j = 8; k = 9;
11    printf("b.) %d \n", i - 7 && j++ < k);
12
13    i = 7; j = 8; k = 9;
14    printf("c.) %d \n", (i == j) || (j == k));
15    printf("%d %d %d \n", i, j, k);
16
17    i = j = k = 1;
18    printf("d.) %d \n", ++i || ++j && ++k);
19    printf("%d %d %d \n", i, j, k);
20
21 }
22
```

Compilation results...

```
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\barra\OneDrive\Documents\UPV 1.2\CMSC 21\lecture 2\num3.exe
- Output Size: 127.931640625 KiB
- Compilation Time: 0.66s
```

Process exited after 0.08121 seconds with return value 7
Press any key to continue . . .

a) $i = 3; j = 4; k = 5;$

`printf("%d", i < j || ++j < k);`

output: 1

b) $i = 7; j = 8; k = 9;$

`printf("%d", i - 7 && j++ < k);`

output: 0

c) $i = 7; j = 8; k = 9;$

`printf("%d", (i == j) || (j == k));`

output: 1

`printf("%d %d %d", i, j, k);`

889

d) $i = j = k = 1;$

`printf("%d", ++i || ++j && ++k);`

output: 1

`printf("%d %d %d", i, j, k);`

211