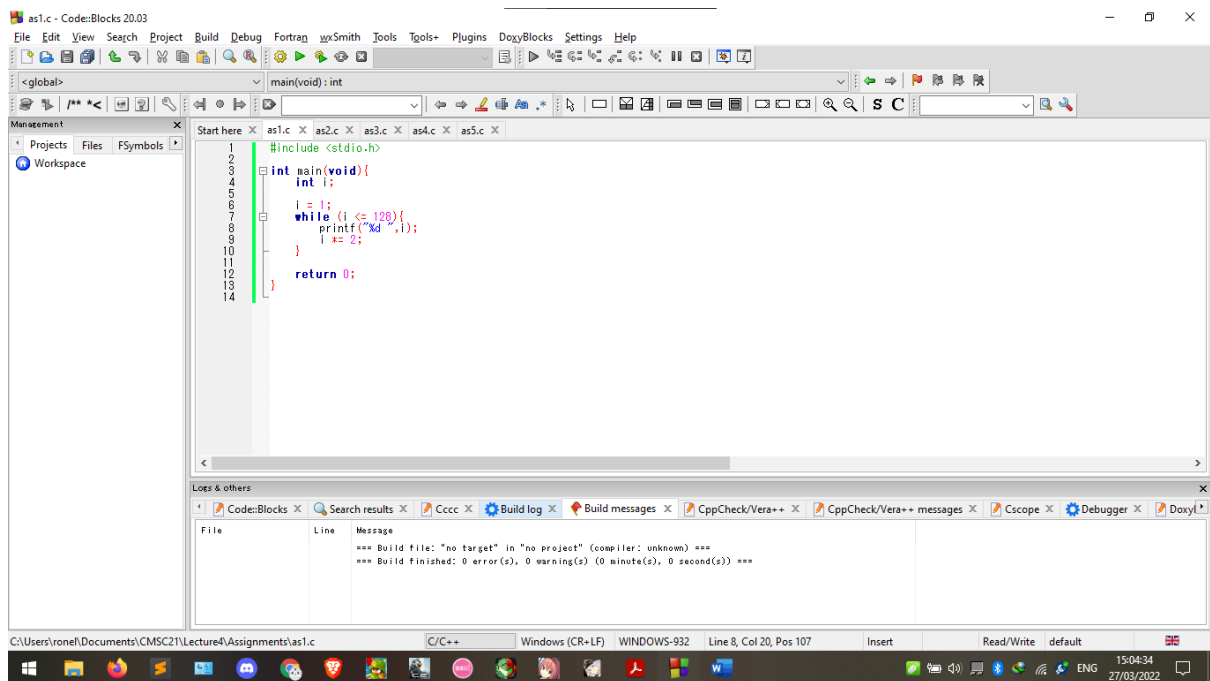


1.

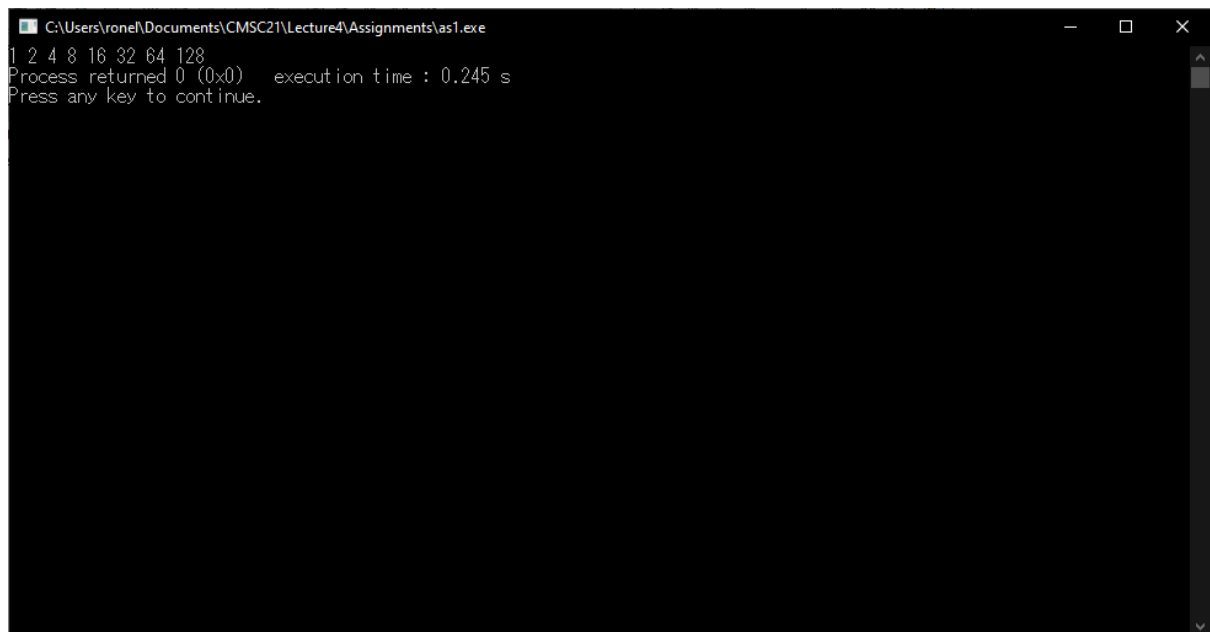


The screenshot shows the Code::Blocks IDE with the following details:

- File:** as1.c - Code::Blocks 20.03
- Menu:** File, Edit, View, Search, Project, Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, Help
- Toolbar:** Includes icons for file operations, compilation, and debugging.
- Project:** as1.c, as2.c, as3.c, as4.c, as5.c
- Code:**

```
1 #include <stdio.h>
2
3 int main(void){
4     int i;
5
6     i = 1;
7     while (i <= 128){
8         printf("%d ", i);
9         i *= 2;
10    }
11    return 0;
12 }
13
14
```
- Log & others:**
 - Code::Blocks
 - Search results
 - Cccc
 - Build log
 - Build messages
 - CppCheck/Vera++
 - CppCheck/Vera++ messages
 - Cscope
 - Debugger
 - DoxyL
- Log Message:**

```
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===
```
- Status Bar:** C/C++, Windows (CR+LF), WINDOWS-932, Line 8, Col 20, Pos 107, Insert, Read/Write, default, ENG, 15:04:34, 27/03/2022



The screenshot shows a terminal window with the following output:

```
C:\Users\rone\Documents\CMSC21\Lecture4\Assignments\as1.exe
1 2 4 8 16 32 64 128
Process returned 0 (0x0)   execution time : 0.245 s
Press any key to continue.
```

2.

The screenshot displays the Code::Blocks IDE interface. The main editor window shows a C++ program in `as2.c` with the following code:

```
1 #include <stdio.h>
2
3 int main(void){
4     int i;
5
6     i=10;
7     while (i < 10){
8         printf("%d",i);
9         i++;
10    }
11
12    for (i = 10; i < 10; i++){
13        printf("%d",i);
14        i++;
15    }
16
17    do{ printf("%d",i);
18        i++;
19    }while(i < 10);
20
21    return 0;
22
23
24 }
```

Below the editor, the 'Log & others' panel shows the build output:

```
File      Line      Message
====
Build file: "no target" in "no project" (compiler: unknown)
Build finished: 0 error(s), 0 warning(s) (0 minute(s), 2 second(s))
```

The bottom window shows the execution of `as2.exe` in a command prompt:

```
C:\Users\ronef\Documents\CMSC21\Lecture4\Assignments\as2.exe
10
Process returned 0 (0x0)   execution time : 0.310 s
Press any key to continue.
```

3.

The screenshot displays the Code::Blocks IDE interface. The main editor window shows a C program in `as3.c` with the following code:

```
1 #include <stdio.h>
2
3 int main(void) {
4     int i;
5     for (i = 1; i <= 128; i += 2) {
6         printf("%d ", i);
7     }
8     return 0;
9 }
```

The 'Log messages' panel at the bottom shows the build output:

```
=== Build file: "no target" in "no project" (compiler: unknown) ===
=== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 0 second(s)) ===
```

Below the IDE, a terminal window shows the execution of `as3.exe`:

```
C:\Users\ronef\Documents\CMSC21\Lecture4\Assignments\as3.exe
1 2 4 8 16 32 64 128
Process returned 0 (0x0)   execution time : 0.020 s
Press any key to continue.
```

4.

The screenshot displays a C++ development environment with the following components:

- Code Editor:** Contains the source code for `as4.c`. The code includes `<stdio.h>` and defines a function `asin(void)` that prints powers of 2 from 2^0 to 2^{10} .

```
1 #include <stdio.h>
2
3 int asin(void){
4     int i;
5     printf("n 2 to the n\n-----\n");
6     for (i = 0; i <= 10; i++){
7         printf("%2d %4d\n", i, (int)pow((double) 2,i));
8     }
9     return 0;
10 }
11
12
```
- Build Messages:** Shows compiler warnings for implicit declarations of `pow` and `main`.

```
File Line Message
C:\Users\rone1\Documents\CMSC21\Lecture4\Assignments\as4.c 7 warning: implicit declaration of function 'pow' [-Wimplicit-function-declaration]
C:\Users\rone1\Documents\CMSC21\Lecture4\Assignments\as4.c 7 warning: incompatible implicit declaration of built-in function 'pow'
note: include <math.h> or provide a declaration of 'pow'
*** Build finished: 0 error(s), 2 warning(s) (0 minute(s), 0 second(s)) ***
```
- Output Window:** Shows the execution of `as4.exe`, displaying the calculated powers of 2.

```
n 2 to the n
-----
0 1
1 2
2 4
3 8
4 16
5 32
6 64
7 128
8 256
9 512
10 1024

Process returned 0 (0x0) execution time : 0.073 s
Press any key to continue.
```

5.

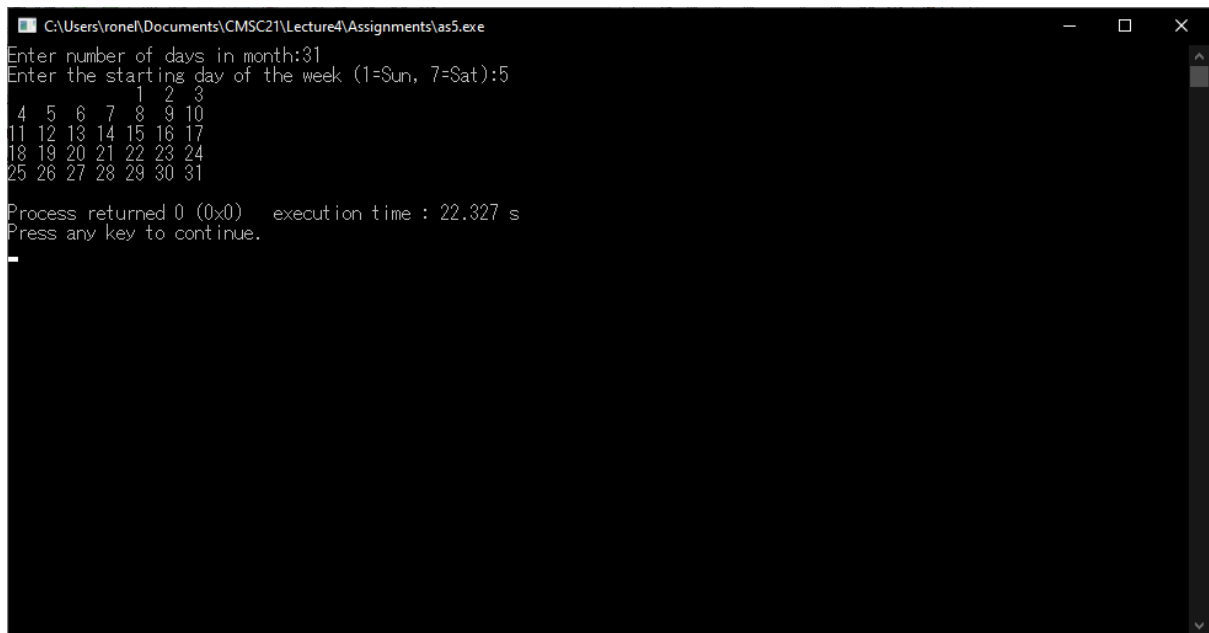
The image displays two screenshots of the Code::Blocks IDE, showing the development of a C program to calculate the day of the week for a given date.

Top Screenshot: The main window shows the source code for `as5.c`. The code includes `<stdio.h>` and defines `main(void)`. It prompts the user to enter the number of days in the month and the starting day of the week (1=Sun, 7=Sat). It then calculates the day of the week by subtracting one from the starting day and looping through the days in the month. The code uses `printf` to display the result.

Bottom Screenshot: The main window shows the source code for `as5.c`. The code includes `<stdio.h>` and defines `main(void)`. It prompts the user to enter the number of days in the month and the starting day of the week (1=Sun, 7=Sat). It then calculates the day of the week by subtracting one from the starting day and looping through the days in the month. The code uses `printf` to display the result.

Build Log: The build log shows the following messages:

```
=== Build file: "no target" in "no project" (compiler: unknown) ===
In function 'main':
warning: implicit declaration of function 'pow' [-Wimplicit-function-declaration]
warning: incompatible implicit declaration of built-in function 'pow'
note: include <math.h> or provide a declaration of 'pow'
=== Build finished: 0 error(s), 2 warning(s) (0 minute(s), 0 second(s)) ===
```



```
C:\Users\rone\Documents\CMSC21\Lecture4\Assignments\as5.exe
Enter number of days in month:31
Enter the starting day of the week (1=Sun, 7=Sat):5
  1  2  3
4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31

Process returned 0 (0x0)   execution time : 22.327 s
Press any key to continue.
```