

# Pretest Report

CIS-310

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# **Github Link:**

The files mentioned in this report is stored in the following github location:  
[https://github.com/ajakhtar/CIS-310/tree/368243c166735c4ba09ba0a8b723b4f051ba23fc/Pretest/CIS310 Pretest DecConverter](https://github.com/ajakhtar/CIS-310/tree/368243c166735c4ba09ba0a8b723b4f051ba23fc/Pretest/CIS310%20Pretest%20DecConverter).

## **1. Required Tools**

To compile the source code you need a C++ compiler that supports standard C++. If you do not already have a compiler installed, the recommended setups are:

- Windows: Install MinGW or use Visual Studio with C++ Build Tools
- macOS: Install Xcode Command Line Tools by running  
xcode-select --install
- Linux: Install g++ using your package manager, for example  
sudo apt install g++

## **2. Saving the Source File**

Create a new file named decimal\_converter.cpp, copy the entire program into the file. Make sure the file extension is .cpp.

## **3. Compiling the Program**

The exact compile command depends on the compiler. The following commands will create an executable file from the source code.

### **Using g++ (Windows, macOS, Linux)**

Open a terminal or command prompt in the same folder as the .cpp file and run:

```
g++ decimal_converter.cpp -o decimal_converter
```

This command produces an executable called decimal\_converter. On Windows, the generated file will be:

```
decimal_converter.exe
```

After compiling, run the program from the Windows terminal:

```
decimal_converter.exe
```

# Test Output:

210	1101 0010	D2	0010 0001 0000
211	1101 0011	D3	0010 0001 0001
212	1101 0100	D4	0010 0001 0010
213	1101 0101	D5	0010 0001 0011
214	1101 0110	D6	0010 0001 0100
215	1101 0111	D7	0010 0001 0101
216	1101 1000	D8	0010 0001 0110
217	1101 1001	D9	0010 0001 0111
218	1101 1010	DA	0010 0001 1000
219	1101 1011	DB	0010 0001 1001
220	1101 1100	DC	0010 0010 0000
221	1101 1101	DD	0010 0010 0001
222	1101 1110	DE	0010 0010 0010
223	1101 1111	DF	0010 0010 0011
224	1110 0000	E0	0010 0010 0100
225	1110 0001	E1	0010 0010 0101
226	1110 0010	E2	0010 0010 0110
227	1110 0011	E3	0010 0010 0111
228	1110 0100	E4	0010 0010 1000
229	1110 0101	E5	0010 0010 1001
230	1110 0110	E6	0010 0011 0000
231	1110 0111	E7	0010 0011 0001
232	1110 1000	E8	0010 0011 0010
233	1110 1001	E9	0010 0011 0011
234	1110 1010	EA	0010 0011 0100
235	1110 1011	EB	0010 0011 0101
236	1110 1100	EC	0010 0011 0110
237	1110 1101	ED	0010 0011 0111
238	1110 1110	EE	0010 0011 1000
239	1110 1111	EF	0010 0011 1001
240	1111 0000	F0	0010 0100 0000
241	1111 0001	F1	0010 0100 0001
242	1111 0010	F2	0010 0100 0010
243	1111 0011	F3	0010 0100 0011
244	1111 0100	F4	0010 0100 0100
245	1111 0101	F5	0010 0100 0101
246	1111 0110	F6	0010 0100 0110
247	1111 0111	F7	0010 0100 0111
248	1111 1000	F8	0010 0100 1000
249	1111 1001	F9	0010 0100 1001
250	1111 1010	FA	0010 0101 0000
251	1111 1011	FB	0010 0101 0001
252	1111 1100	FC	0010 0101 0010
253	1111 1101	FD	0010 0101 0011
254	1111 1110	FE	0010 0101 0100
255	1111 1111	FF	0010 0101 0101

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