HUMBER

CENG 356 Lab Report

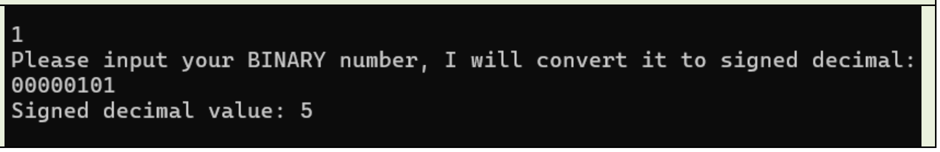
Lab: lab 2	
Name: Yashika Bhatt	**Student ID: N01661425**
Date: 2/3/26	

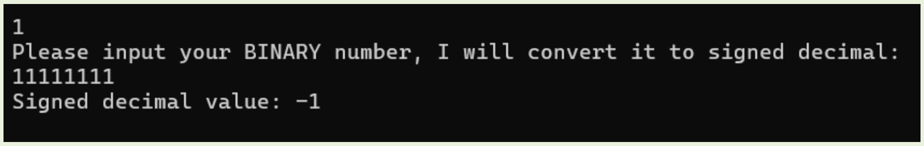
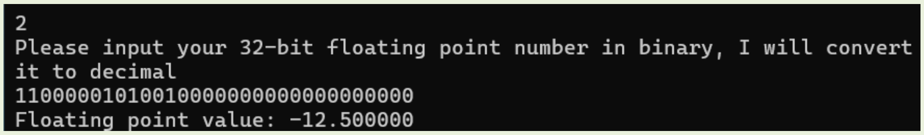
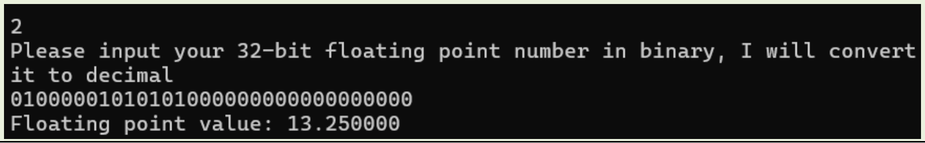
Please refer to the lab manual posted on the blackboard and fill in the blanks in the following table as your lab report.

Notice: All labs are individual work and submission. All academic misconduct behaviors will be penalized to the maximum extent possible according to college policy. Thanks for your attention. (Reference Link: About Academic Misconduct)

Fill in all the ***lab report submission requirements*** in the following table. Please add more rows if necessary.

<table>
<tr><th>Requirements</th><th>Your submissions (Answers/Source Code/Screenshots/File Submissions, etc.)
Please note: If it is required to submit a separate file, please attach it separately on the blackboard or attach a link to a GitHub repo with the file.</th></tr>
<tr><td>Part 1 - Question</td><td><b>No, I did not use strcpy() in my program.</b>
I used scanf() to get the binary input from the user, and then I directly passed that input to the conversion functions.
Using strcpy() was only suggested in the lab instructions as a hint for testing predefined binary strings.
But in my final code, I did not use it.

However, I don’t think using strcpy() is the best practice for real programs. strcpy() does not check the size of the destination array, so if the input string is larger than the array, it can cause a buffer overflow and crash the program.</td></tr>
<tr><td>Part 2 – Question</td><td>
<table>
<tr><td>Overall Score</td><td>997</td></tr>
<tr><td>CPU Model</td><td>Intel Core i7 – 1255U</td></tr>
<tr><td>CPU Score</td><td>379</td></tr>
<tr><td>GPU Score</td><td>58</td></tr>
<tr><td>RAM Score</td><td>227</td></tr>
<tr><td>Disk Score</td><td>333</td></tr>
<tr><td>Disk Write Speed</td><td>Sequential – 3237 MB/s
Random – 84 MB/s</td></tr>
<tr><td>Disk Read Speed</td><td>Sequential – 3146 MB/s
Random – 39 MB/s</td></tr>
<tr><td>RAM Read Speed</td><td>7151 – MB/s</td></tr>
<tr><td>GPU Model</td><td>Intel Iris Xe Graphics</td></tr>
</table>
</td></tr>
<tr><td>Your source code (in C programming language)</td><td>https://github.com/yashikabhatt1425/Computer-Systems-Arch---CENG-356-0CB.git</td></tr>
<tr><td>Screenshots of the code’s running results (at least 4 cases: 2 cases for whole</td><td>
1
Please input your BINARY number, I will convert it to signed decimal:
00000101
Signed decimal value: 5</td></tr>
</table>

numbers in option 1; and 2 cases for floating-point numbers in option 2.)	 1 Please input your BINARY number, I will convert it to signed decimal: 11111111 Signed decimal value: -1  2 Please input your 32-bit floating point number in binary, I will convert it to decimal 11000001010010000000000000000000 Floating point value: -12.500000  2 Please input your 32-bit floating point number in binary, I will convert it to decimal 01000001010101000000000000000000 Floating point value: 13.250000