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Course: CS165 Date: 11/5/17

Description: Assignment 6b Group Part

Which program did your group decide on?

We decided on Bridget McGinn's program.

What advantages do you think that program has over the others?

One of the advantages of Bridget's program was that it used the most direct algorithm to solve the problem. Other programs contained some unnecessary steps that Bridget's was able to consolidate into a shorter, more easy to read program. An example of this is avoiding the use of helper functions in the program. Additionally, the documentation is enough to explain the components, but does not disrupt the readability of the program.

What improvements do you think could be made to that program?

One of the improvements that could be made would be to remove an unnecessary *static_cast* in **binToDec** by changing her *line 25* from:

```
if (static_cast<int>(binarynumber[0]) == 49)
to
if (binary[count] == '1')
```

Another improvement that could be made would be to change the two calls to substr within binToDec. Since the string we are attempting to pass is every character after the current character, there is no need to pass a second parameter. So we can update both to these calls from:

```
binToDec(binarynumber.substr(1,length-1))

to
binToDec(binarynumber.substr(1))
```

Finally, in Colin's program he decided to set the base value as a constant, which would be a potential improvement to the program as well in order to make it more versatile.