

# CMSC-16100

Honors Introduction to Programming, I  
Autumn Quarter, 2020

## Lecture 12: Concrete Monads: IO

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\***Exercise 12.1** Write a Haskell program `enumerate` which processes standard input, adding line numbers. E.g., if you have a file `numbers.txt` containing:

```
one
two
three
four
five
six
seven
eight
nine
ten
```

then `$ ./enumerate < numbers.txt` produces:

```
1. one
2. two
3. three
4. four
5. five
6. six
7. seven
8. eight
9. nine
10. ten
```

Hint: look at the `lines` and `getContents` functions in the [Prelude](#).

For extra credit, add the minimum number of spaces before each letter so that the decimal points line up, i.e.,

```
1. one
2. two
3. three
4. four
5. five
6. six
```

6. six
7. seven
8. eight
9. nine
10. ten