

Comp 520: Milestone #3

The Heapsters

1 Introduction

We decided to generate Python. At this point, we feel we have completed most of the code generator, despite deciding to re-implement our type checking system.

2 Implementation Complete

- All literals except rune
 - We haven't decided how to handle the discrepancy between char and int representations of runes in python
- Operators including increment/decrement, unary, and binary
- Print and println
- Loops including while, for
- Switch statements
- Op assign
- Function declarations
- Function call expressions
- Continue and break
- Return
- Assignment statements
- Short declarations

3 Implementation in Progress:

- Array, field, append, typecasting
- Struct, distributed var dec, if else
- Scoping rules have some problems (e.g. variable naming conventions since python has different scoping rules)
- We still have a lot of "pass" keywords in our generated code to handle empty blocks
- In python, ints aren't 32 bit so when translating go into python we need to add a bit wrap around to force the overflow