CSCI 5535: Homework Assignment 2: Language Design and Implementation

YOUR NAME

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1 Language Design: IMP

1.1.

2 Language Implementation: ETPS

See `hw02.ml` and `test_hw02.ml`.

3 Final Project Preparation: Pre-Proposal

3.1.

A Syntax of IMP

Typ	τ	::=	`num`	`num`	numbers
			`bool`	`bool`	booleans
Exp	e	::=	`addr`$[a]$	a	addresses (or "assignables")
			`num`$[n]$	n	numeral
			`bool`$[b]$	b	boolean
			`plus`$(e_1;e_2)$	$e_1 + e_2$	addition
			`times`$(e_1;e_2)$	$e_1 * e_2$	multiplication
			`eq`$(e_1;e_2)$	$e_1 == e_2$	equal
			`le`$(e_1;e_2)$	$e_1 <= e_2$	less-than-or-equal
			`not`(e_1)	$!e_1$	negation
			`and`$(e_1;e_2)$	$e_1 \,\&\&\, e_2$	conjunction
			`or`$(e_1;e_2)$	$e_1 \,\|\|\, e_2$	disjunction
Cmd	c	::=	`set`$[a](e)$	$a := e$	assignment
			`skip`	`skip`	skip
			`seq`$(c_1;c_2)$	$c_1; c_2$	sequencing
			`if`$(e;c_1;c_2)$	`if` e `then` c_1 `else` c_2	conditional
			`while`$(e;c_1)$	`while` e `do` c_1	looping
Addr	a				