

COS126 TOY Programming Activity - Booksite 5.2-5.4

- Group Activity:

- Leader
- Recorder
- Reporter

1. TOY has _____ registers called R[0] thru _____
2. Which register is special? _____ How?
3. TOY has _____ memory locations, addressed _____ thru _____
4. Which memory address is special? _____ How?
5. TOY has _____ op codes, _____ thru _____
6. TOY has one PC. What does PC mean?
7. TOY code is usually written in (choose one)
binary hex decimal java
8. Fill in the missing Code, Pseudo-code, Address or Comment.

Address	Code	Pseudo-code	Comment
10:	7101	R[1] <- 01	R[1] holds the constant 1
11:	4222	_____	Initialize R[2] to _____
12:	_____	R[3] <- 01	_____
13:	85FF	_____	Read N from Stdin
14:	1423	R[4] <- R[2]+R[3]	We'll keep a sum in R[4]
15:	1203	_____	Copy R[3] over to R[2]
16:	_____	_____	Copy R[4] over to R[3]
17:	_____	R[5] <- R[5]-R[1]	Subtract 1 from N
18:	D514	_____	N > 0? Do it again.
19:	_____	_____	Send the sum in R[4] to Stdout
__:	0000	_____	All done!