Test Generation Report
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1 Single Argument

executable	Failed case	explanation
msdscript	All passed	
msdscript0	-37168 + -5559	failed
msdscript1	17788	failed
msdscript2	All passed	
msdscript3	(28573 + 22567) * 30875 * -35658	Values are not equal because there's some problems with its print method
msdscript4	All passed	
msdscript5	All passed	
msdscript6	All passed	
msdscript7	All passed	

2 Two Arguments

2.1 Pass rates

Compare the result of each executable with msdscript on 100 random test cases and calculate the pass rate.

Table 1. Pass rates of each executable in different modes

executable	Pass rate		
	interp	print	pretty_print
msdscript	100%	100%	100%
msdscript0	0%	0%	0%
msdscript1	0%	0%	0%
msdscript2	77%	100%	93%
msdscript3	100%	70%	92%
msdscript4	100%	100%	89%
msdscript5	100%	100%	96%
msdscript6	100%	100%	82%
msdscript7	36%	37%	29%

2.2 Failed cases

msdscript0
fails in any test cases

mode	input	output
interp	-3542	exit_code = 1, exec failed
print	9270	exit_code = 1, exec failed
pretty_print	21344	exit_code = 1, exec failed

msdscript1

random output for interp; print nothing in print and pretty-print mode

mode	input	output
interp	(-47511*-34462)	8207
print	3800	""
pretty_print	-45582	""

msdscript2

wrong interp on some cases; wrong indentation for LetExpr

mode	input	output
interp	(24648*32796)	57444
print	N/A	
pretty_print	((_let HZs=(-45042*-1815) _in 9173)+(_let Zqoi=(15911*-9118) _in (14435+-32479)))	(_let HZs = -45042 * -1815 _in 9173) + _let Zqoi = 15911 * -9118 _in 14435 + -32479

msdscript3

print "+" as "*"; wrong indentation for LetExpr in pretty-print

mode	input	output
interp	(24648*32796)	57444
print	(_let oo=(-21831+((19024+(-45241+(37581*3852)))+-40586)) _in -59)	(_let oo=(-21831*((19024*(-45241*(37581*3852)))*-40586)) _in -59)
pretty_print	(-11858+((17663*(((_let ak=-18943 _in 17241)+1655)+(_let TTTLy=-34299 _in 30043)))+-47780))	-11858 + 17663 * (((_let ak = -18943 _in 17241) + 1655) + _let TTTLy = -34299 _in 30043) + -47780

msdscript4

no parentheses in pretty_print

mode	input	output
interp	N/A	
print	N/A	
pretty_print	((11140*-39846)*14130)	11140 * -39846 * 14130

msdscript5

wrong indentation in pretty-print

mode	input	output
interp	N/A	
print	N/A	

pretty_print	((((((_let oaPFJ=36268 _in (-34595*-13607))*(_let aqwwq=-45041 _in -4582))*25609)*-37947)+-24928)+((34339*-38469)+(30051*(38054+(((36934*33241)*-28388)*34434)))))	((((_let oaPFJ = 36268
		  _in -34595 * -13607) * _let aqwwq = -45041
		               _in -4582) * 25609) * -37947 + -24928) + 34339 * -38469 + 30051 * (38054 + ((36934 * 33241) * -28388) * 34434)

msdscript6

no indentation for LetExpr in pretty-print

mode	input	output
interp	N/A	
print	N/A	
pretty_print	(((3954+5736)+(_let gXc=-38571 _in 8421))+(-47043*34272))	((3954 + 5736) + _let gXc = -38571 _in 8421) + -47043 * 34272

msdscript7

can't parse negative numbers

mode	input	output
interp	-27691	27691
print	((-33900*-44298)+(_let PTuJZ=(_let ysuZ=(_let Z=40255 _in -46156) _in -1450) _in 40277))	((33900*44298)+(_let PTuJZ=(_let ysuZ=(_let Z=40255 _in 46156) _in 1450) _in 40277))
pretty_print	(_let B=(-30772+(3940*(-34043+(390*8144)))) _in 9294)	_let B = 30772 + 3940 * (34043 + 390 * 8144) _in 9294