**Test Generation Report**

Yue Sun

**1 Pass rates**

Test each executable with msdscript on 100 random test cases and calculate the pass rate.

Table 1. Pass rate of each executable

|  |  |  |  |
| --- | --- | --- | --- |
| **executable** | **Pass rate** | | |
| **interp** | **print** | **pretty\_print** |
| msdscript | 100% | 100% | 100% |
| msdscript0 | 0% | 0% | 0% |
| msdscript1 | 0% | 0% | 0% |
| msdscript2 | 75% | 100% | 96% |
| msdscript3 | 100% | 67% | 94% |
| msdscript4 | 100% | 100% | 92% |
| msdscript5 | 100% | 100% | 93% |
| msdscript6 | 100% | 100% | 82% |
| msdscript7 | 100% | 100% | 98% |

**2 Failed cases**

msdscript0

|  |  |
| --- | --- |
| interp | 555212496 |
| print | 402989976 |
| pretty\_print | 494754582 |

msdscript1

|  |  |
| --- | --- |
| interp | 933679450 \* 1476884587 |
| print | 1749669597 |
| pretty\_print | 769772867 |

msdscript2

|  |  |
| --- | --- |
| interp | 310975731 + 1236318797 \* (103382178 + 59148361) |
| print | N/A |
| pretty\_print | (671731557 \* (\_let ePe = 1787496870  \_in 813817754) + 960989992) + 325604139 |

msdscript3

|  |  |
| --- | --- |
| interp | N/A |
| print | 1854731681 + 800787045 \* (315322694 + \_let ZVsc = 825633535  \_in 491127884) |
| pretty\_print | ((\_let koJ = \_let cXwo = \_let seZR = 1308810957  \_in 195218960 + 433811550  \_in 109502593  \_in 139493215) + 251665756) + \_let Nykek = 1297324679  \_in 144661063 |

msdscript4

|  |  |
| --- | --- |
| interp | N/A |
| print | N/A |
| pretty\_print | (1376253263 \* 300293917) \* 1208731545 \* 1907334874 + 238357186 + 697999752 \* 1079236327 |

msdscript5

|  |  |
| --- | --- |
| interp | N/A |
| print | N/A |
| pretty\_print | 710632755 \* (1726832638 + (43869802 \* 1549105906) \* (\_let Pqy = 442529360  \_in 1557304139) + 1712153506) |

msdscript6

|  |  |
| --- | --- |
| interp | N/A |
| print | N/A |
| pretty\_print | ((\_let PZLi = 315224553  \_in PZLi + 571866132 + \_let am = 1516129174 + 187444460  \_in 951997278 \* am) \* 1466120201) \* 1506685578 |

msdscript7

|  |  |
| --- | --- |
| interp | N/A |
| print | N/A |
| pretty\_print | (\_let JPTZF = 418347551  \_in \_let Bk = 437944066 + 1657996563  \_in 1091741134) + (\_let i = (78335409 + (1648897928 \* 1704371899) \* 441312580) + 1443382507  \_in 629039131 \* i) + ((1204557629 + 1758543973) + 627685920) + 711104262 |