

Test Cases

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1 Valid Test Cases

1.1 Simple 1

```
1 /* Simple test case */  
2 {}$
```

Results: Valid

1.2 Simple 2

```
1 /* Test case for print statement */  
2 {  
3     print("i love compilers")  
4 }$
```

Results: Valid

1.3 Regular

```
1 /* Test case for a 'regular' program*/  
2 {  
3     int a  
4     a = 1  
5     print(a)  
6     boolean b  
7     b = true  
8     print(b)  
9  
10    {  
11        int a  
12        a = 2  
13        print(a)  
14    }  
15  
16    {  
17        int a  
18        a = 3  
19        print(a)  
20    }  
21  
22    string s  
23    s = "stra"  
24    print(s)  
25  
26    s = "strb"  
27    print(s)  
28  
29    if (a != 5) {
```

```

30         print("true")
31     }
32
33     if (a == 5) {
34         print("false")
35     }
36 }$

```

Results: Valid

1.4 Multiple

```

1  /* Test case for multiple programs */
2  {
3      print("i love compilers")
4      int a
5      a = 2
6      string s
7      s = "ha"
8  }$
9
10 {
11     int b
12     b = 4
13     string s
14     s = "hey"
15 }$

```

Results: Valid

1.5 Crazy One Liner (Lex Pass)

```

1  /* Test case for crazy one liner */
2  +${hellotrufalse!====trueprinta=3b=0print("false true")whi33leiftruefalsestring!=
   stringintbooleanaa truewhileif{hi++++==!==}}/*aaahaha*/hahahahaha/*awao*/$

```

Results: Valid

2 Warning Test Cases

2.1 Missing EOP

```

1  /* Missing EOP */
2  {
3      int b
4      b = 4
5      string s
6      s = "hey"
7  }

```

Results: WARNING: No EOP [\$] detected at end-of-file. Adding to end-of-file...

3 Lex Fail Programs

3.1 Alan

```

1  /* Provided By
2     - Compiler Tyrant
3     - Alan G Labouseur
4  */

```

```

5  {}$
6  {{{{{{}}} }}}$
7  {{{{{{}}} }}}$
8  {int  @}$

```

Results: ERROR: Unrecognized or Invalid Token [@] on line 8 col 5

3.2 Invalid String 1

```

1  /* Test case for placing $ in quotes */
2  {
3      print("i love com$pilers")
4      int a
5      a = 2
6      string s
7      s = "ha"
8      "
9  }$

```

Results: ERROR: Invalid character in String [\$] on line 3 col 21

3.3 Invalid String 2

```

1  /* Test case for invalid characters in string */
2  {
3      string s
4      s = "cookies & cream"
5  }$

```

Results: ERROR: Invalid character in String [&] on line 4 col 17

3.4 Invalid String 3

```

1  /* Test case for placing \n in quotes */
2  {
3      "hey
4      there"
5  }$

```

Results: ERROR: Invalid character in String [\n] on line 3 col 8

3.5 Invalid String 4

```

1  /* Test case for missing ending quote */
2  int a
3  a = 4
4  string s
5  s = "hey there

```

Results: ERROR: Missing ending quote for String literal starting on line 5 col 4

3.6 Invalid Print

```

1  /* Test case for invalid print */
2  {
3      print("my name is 11")
4  }$

```

Results: ERROR: Invalid character in String [1] on line 3 col 22

3.7 Missing End Comment Brace

```
1 /* Test case for missing end comment brace */
2 {
3     print("my name is eleven")
4     /* hey i love compilers
5 }$
```

Results: ERROR: Missing ending comment brace (*/) for comment starting on line 4 col 4