Sindhu Parajuli
1001764819

Test cases, test path, input and expected output

1. **is_keyword**
   Test paths:- [1,2]
   i. Input -: if
   ii. Expected Output :- True .
   Test paths:- [1,3]
   i. Input -: then
   ii. Expected Output :- False

2. **is_num_constant**
   Test paths:- [1,2,3,4,2,6]
   i. Input -: 99
   ii. Expected Output :- True
   Test paths:- [1,7]
   i. Input -: Sandy
   ii. Expected Output :- False
   Test paths :- [1,2,3,5]
   i.Input :- 9B
   ii. Expected Output :- False

3. **is_str_constant**
   a. Test paths:- [1,2,3,4]
      i. Input -: “”
      ii. Expected Output :- True
   b. Test paths:- [1,7]
      i. Input -: 9
      ii. Expected Output :- False
   c. Test paths :- [1,2,3,5,2,6]
      i. Input:- “sandy”
      ii.Expected Output :- True
   d. Test paths :- [1,2,6]
      i.Input :- “

ii. Expected Output :- False

4. **is_identifier**
   a. Test paths:- [1,2,3,4,2,6]
      i. Input -: b9
      ii. Expected Output :- True
   b. Test paths:- [1,7]
      i. Input -: 9
      ii. Expected Output :- False
   c. Test paths :- [1,2,6]
      i. Input:- 1
      ii.Expected Output :- True
   d. Test paths :- [1,2,3,5]
      i.Input :- b
      ii. Expected Output :- true

5. **is_token_end**
   a. Test paths:- [1,2]
      i. Input -: 99,-1
      ii. Expected Output :- True
   b. Test paths:- [1,3,4,6]
      i. Input -: 1,99
      ii. Expected Output :- False
   c. Test paths :- [1,3,4,5]
      i. Input:- 1,13
      ii.Expected Output :- True
   d. Test paths :- [1,3,7,8,9]
      i.Input :- 2,13
      ii. Expected Output :- true
   e. Test paths:- [1,3,7,8,10]
      i. Input -: 2,99
      ii. Expected Output :- False
   f. Test paths:- [1,3,7,11,12]
      i. Input -: 5,40
      ii. Expected Output :- True
   g. Test paths :- [1,3,7,11,13,14]
      i. Input:- 30,32
      ii.Expected Output :- True
   h. Test paths :- [1,3,7,11,13,15]
      i.Input :- 5,90

ii. Expected Output :- false

5. **Get_token [All input are provided in a file]**

a. Test paths:- [1,2]
   i. Input -: Empty file
   ii. Expected Output :- null

b. Test paths:- [1,3,4,6,7]
   i. Input -: File with new line character [\n\0]
   ii. Expected Output :- null

c. Test paths :- [1,3,4,5,4,6,7]
   i. Input:- File with two new line character [\n\n\0]
   ii.Expected Output :- null

d. Test paths :- [1,3,4,6,8,9]
   i.Input :- File with , character [,]
   ii. Expected Output :- ,

e. Test paths:- [1,3,4,6,8,10,11, 12, 14, 15,]
   i. Input -: File with “ character [“]
   ii. Expected Output :- “

f. Test paths :- [1,3,4,6,8,10, 12, 14, 16,17,18,19,21,22]
   i. Input:- S
   ii.Expected Output :- S

g. Test paths :- [1,3,4,6,8,10, 12, 14, 16,17,21,22]
   i.Input :- Sam
   ii. Expected Output :- Sam

h. Test paths:- [1,3,4,6,8,10, 12, 14, 16,17,21,23,24]
   i. Input -: Sandy[
   ii. Expected Output :- Sandy

i. Test paths:- [1,3,4,6,8,10, 12, 14, 16,17,21,23,25,26,27,28]
   i. Input -: Sandy”
   ii. Expected Output :- Sandy”

j. Test paths :- [1,3,4,6,8,10, 12, 14, 16,17,21,23,25,29,30]
   i. Input:- Sandy;
   ii.Expected Output :- Sandy

L. Test paths :- [1,3,4,6,8,10, 12, 14, 16,17,21,23,25,29,31]
   i.Input :- “Sandy”
   ii. Expected Output :- “Sandy”

m. Test paths :- [1,3,4,6,8,10, 12, 14, 16,17,21,23,25,26,28]

i. Input :- ;Sandy
ii.Expected Output :- ;Sandy

6. **Main**

a. Test paths:- [1,2,6,7,8,9,12]
   i. Input -: Empty text file
   ii. Expected Output :- No output
b. Test paths:- [1,3,5]
   i. Input -: No Input
   ii. Expected Output :- “Error! Please give the token stream”
c. Test paths :- [1, 2, 6, 7, 8, 9, 10, 11, 9, 12]
   i. Input:- * (C:\Users\Sindhu parajuli\Desktop\HCI.txt)
   ii.Expected Output :- error,"*".
d. Test paths :- [1,3,4,6,7,8,9,12]
   i.Input :- Empty file
   ii. Expected Output :- No output

End to End Coverages

1. Test path
   main[1,2,6,7 -> open_token_stream[1,2 ->
   open_character_stream[1,2,4],4],8 ->get_token[1,2],9,12]
   Input :- * (C:\Users\Sindhu parajuli\Desktop\HCI.txt)

   Expected Output :- error,"*".

2. Test path
   main[1,2,6,7 -> open_token_stream[1,3 ->
   open_character_stream[1,3,4],4],8 ->get_token[1,3,4,6,7],9,12]
   Input :- ((C:\Users\Sindhu parajuli\Desktop\HCI.txt)
   Expected Output :- lparen.

3. Test path
   main[1,2,6,7 -> open_token_stream[1,3 ->
open_character_stream[1,3,4],4],8 ->get_token[1,3,4,6,7],9,10, 11, 9, 12]

Input :- (((C:\Users\Sindhu parajuli\Desktop\HCI.txt)
Expected Output :-
lparen.
lparen.