**Test Cases: cat**

Files:

* cat1.txt, cat2.txt
* input1.txt, input2.txt, input3.txt, input4.txt input5.txt, input6.txt, input7.txt input8.txt, input9.txt
* output1.txt, output2.txt, output3.txt output4.txt, output5.txt, output7.txt, output9.txt

Files Description:

* input files contains the input command
* output files contains the expected output
* There is no output6.txt and output8.txt

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| --- | --- | --- |
| Input | Expected Output | Explanation |
| cat cat1.txt | this is a file "cat1.txt" | The name “cat1.txt” does not contain a space. Output the content of the file |
| cat “cat2.txt” | This is a file “cat2.txt” | The name “cat2.txt” contain a space. Double quote is require to output the content of the file |
| cat cat1.txt “cat2.txt” | this is a file "cat1.txt"  This is a file “cat2.txt” | Output the content of 2 files “cat1.txt” & “cat2.txt” |
| cat cat2.txt | cat: Cant read file | A space exist in the [FILE] so error in reading file |
| cat < cat1.txt | this is a file "cat1.txt" | Using input stream to output the file |
| cat < cat1.txt > output.txt |  | Redirect and save the content of “cat1.txt” into output.txt |
| cat | cat: InputStream not provided | There is no [FILE] provided |
| cat invalidfile.txt |  | “invalidfile.txt” does not exist so no output |
| cat cat1.txt invalidfile.txt | this is a file "cat1.txt" | Output the content of “cat1.txt”. “invalidfile.txt” does not exist so no output |

**Test Cases: cd**

* Current working directory: C:\User\Tom\Desktop
* Root Directory: C:\
* Home Directory: C:\User\Tom
* Folders on desktop “test1”

All the “cd” commands are executed on the current working directory “C:\User\Tom\Desktop”

The is no “input.txt & output.txt” test cases in the “BF test case” folder as the output will be different on different computer

|  |  |  |
| --- | --- | --- |
| Input | Output | Explanation |
| cd | C:\User\Tom | Return to user home directory |
| cd ~ | C:\User\Tom | Return to user home directory |
| cd \ | C:\ | Return to root directory |
| cd . | C:\User\Tom\Desktop | Remain in current working directory |
| cd .. | C:\User\Tom | Return to parent directory |
| cd test1 | C:\User\Tom\Desktop\test1 | Change directory to “test1” |
| cd test2 | Error message no such directory | No such directory exist |
| cd \User\Tom\Desktop\test1 | Error message absolute path not supported | Does not support absolute path |
| cd ..\.\.\.\\\\\Desktop\.\.\test1 | C:\User\Tom\Desktop\test1 | Using relative path and a combination of cd command to change directory to “test1” |

**Test Cases: pwd**

All the “pwd” command are executed on current working directory: “C:\User\Tom\Desktop”.

The is no “input.txt & output.txt” test cases in the “BF test case” folder as the output will be different on different computer

|  |  |  |
| --- | --- | --- |
| Input | Output | Explanation |
| pwd | C:\User\Tom\Desktop | Print current working directory |
| pwd test.txt | Throws an error message | Does not accept an argument so throws an error |

**Test Cases: echo**

Files:

* input1.txt, input2.txt, input3.txt, input4.txt input5.txt, input6.txt, input7.txt
* output1.txt, output2.txt, output3.txt output4.txt, output5.txt, output6.txt, output7.txt,

Files Description:

* input files contains the input command
* output files contains the expected output

|  |  |  |
| --- | --- | --- |
| Input | Expected Output | Explanation |
| echo hello | hello | Output “hello” |
| echo hello world | hello world | Output “hello world” |
| echo “hello world” | hello world | Output “hello world” using double quotes |
| echo “hello “ world” | shell: Invalid syntax encountered. | Extra double quotes |
| echo “hello “abc” world” | shell: Invalid syntax encountered. | Extra double quotes |
| echo “hello | shell: Invalid syntax encountered. | Missing double quotes |
| echo “hello `echo abc` world” | hello abc world | “echo” received one argument |
| echo ‘hello’ | Hello | Output “hello” using single quote |
| echo ‘hello “there”’ | Hello “there” | Output contains double quote in one of the words |
| echo ‘ this is a bq ` ‘ | this is a bq ` | ` is treated as part of the output rather than ignore |
| echo ee > e.txt |  | New file created named e.txt containing ee |

**Test Cases: head**

Files:

* head1.txt, head2.txt
* input1.txt, input2.txt, input3.txt, input4.txt input5.txt, input6.txt, input7.txt, input8.txt, input9.txt, input10.txt
* output1.txt, output2.txt, output3.txt output4.txt, output5.txt, output6.txt, output7.txt, output8.txt, output9.txt, output10.txt
* invalid command.txt

Files Description:

* head files contains the content for tail test
* input files contains the input command
* output files contains the expected output
* invalid command.txt contains the list of invalid command

|  |  |
| --- | --- |
| Input | Expected Output |
| head head1.txt | Select BOOLEAN such that Follows (5, 6)  false  5000  2 - comment  stmt s1;  Select s1 such that Follows (54, s1)  5000  3 - comment  stmt s1;  Select s1 such that Follows (s1, 178) |
| head head1.txt –n 3 | Select BOOLEAN such that Follows (5, 6)  false  5000 |
| head head1.txt –n 2 | Select BOOLEAN such that Follows (5, 6)  false |
| head head1.txt –n 2 –n 2 | Select BOOLEAN such that Follows (5, 6)  false |
| head –n 5 head1.txt –n 2 | Select BOOLEAN such that Follows (5, 6)  false |
| head –n 5 head1.txt –n 2 –n 5 | Select BOOLEAN such that Follows (5, 6)  false  5000  2 - comment  stmt s1; |
| head –n 2 head1.txt head2.txt –n 1 | Select BOOLEAN such that Follows (5, 6)  asdnfas;fnka |
| head –n 3 head1.txt –n 2 head2.txt | Select BOOLEAN such that Follows (5, 6)  false  asdnfas;fnka  sanla;fn;akdf; |
| head –n 3 head1.txt –n 2 head2.txt head1.txt | Select BOOLEAN such that Follows (5, 6)  false  asdnfas;fnka  sanla;fn;akdf;  Select BOOLEAN such that Follows (5, 6)  false |
| head –n 3 head1.txt –n 2 head2.txt head1.txt –n 4 –n 2 | Select BOOLEAN such that Follows (5, 6)  false  asdnfas;fnka  sanla;fn;akdf;  Select BOOLEAN such that Follows (5, 6)  false |

**Invalid Test Cases**

|  |
| --- |
| Input |
| head –head1.txt |
| head –n –n |
| head –n 3 –n |
| head head1.txt 3 |
| head –n 2 head1.txt 3 |
| head –n head2.txt –n 5 –n 6 head2.txt |
| head 6 head1.txt |
| head head1.txt Head1.txt |

**Test Cases: tail**

Files:

* tail1.txt, tail2.txt
* input1.txt, input2.txt, input3.txt, input4.txt input5.txt, input6.txt, input7.txt, input8.txt, input9.txt, input10.txt, input11.txt
* output1.txt, output2.txt, output3.txt output4.txt, output5.txt, output6.txt, output7.txt, output8.txt, output9.txt, output10.txt, output11.txt
* invalid command.txt

Files Description:

* tail files contains the content for tail test
* input files contains the input command
* output files contains the expected output
* invalid command.txt contains the list of invalid command

|  |  |
| --- | --- |
| Input | Expected Output |
| tail tail1.txt | stmt s1;  Select s1 such that Follows (\_, 1)  5000  5 - comment  stmt s1;  Select s1 such that Follows (\_, s1)  10,100,101,103,104,105,107,109,110,115,116,118,119,12,120,121,122,123,124,125  6 - comment  stmt s1;  Select s1 such that Follows (150, \_) |
| tail –n 3 | 6 - comment  stmt s1;  Select s1 such that Follows (150, \_) |
| tail –n 3 –n 2 | stmt s1;  Select s1 such that Follows (150, \_) |
| tail tail1.txt –n 2 | stmt s1;  Select s1 such that Follows (150, \_) |
| tail tail1.txt –n 2 –n 2 | stmt s1;  Select s1 such that Follows (150, \_) |
| tail –n 5 tail1.txt –n 2 | stmt s1;  Select s1 such that Follows (150, \_) |
| tail –n 5 tail1.txt –n 2 –n 5 | Select s1 such that Follows (\_, s1)  10,100,101,103,104,105,107,109,110,115,116,118,119,12,120,121,122,123,124,125  6 - comment  stmt s1;  Select s1 such that Follows (150, \_) |
| head –n 2 tail1.txt tail2.txt –n 1 | stmt s1;  Select s1 such that Follows (150, \_)  afa23  341234 |
| head –n 3 tail1.txt –n 2 tail2.txt | stmt s1;  Select s1 such that Follows (150, \_)  afa23  341234 |
| head –n 3 tail1.txt –n 2 tail2.txt tail1.txt | stmt s1;  Select s1 such that Follows (150, \_)  afa23  341234  stmt s1;  Select s1 such that Follows (150, \_) |
| head –n 3 tail1.txt –n 2 tail2.txt tail1.txt –n 4 –n 2 | stmt s1;  Select s1 such that Follows (150, \_)  afa23  341234  stmt s1;  Select s1 such that Follows (150, \_) |

**Invalid Test Cases**

|  |
| --- |
| Input |
| tail –tail1.txt |
| tail –n –n |
| tail –n 3 –n |
| tail tail1.txt 3 |
| tail –n 2 tail1.txt 3 |
| tail –n tail2.txt –n 5 –n 6 tail2.txt |
| tail 6 tail1.txt |
| tail tail1.txt Tail1.txt |