Syntax:

Case	Expected Output	\$?	Required
Command + (>,<,<<,>>)	minishell: syntax error near unexpected token `newline'	2	Yes
(<,>,>>,<<) + (<,>,>>,<<)	./minishell: syntax error near unexpected token `operate'	2	Yes
or	./minishell: syntax error near unexpected token `newline'	2	Yes
	./minishell: .: filename argument required	2	Yes
	: command not found	127	Yes
Test/	./minishell: test: No such file or directory	127	Yes
Makefile/	./minishell: Makefile: Not a directory	126	Yes
/	./minishell: /: Is a directory	126	Yes

Signal:

Case	Expected Output	\$?	Required
cat CTRL+C	^C minishell>	130	Yes
cat CTRL+\	^\ minnshill >	131	Yes
cat CTRL+D	minishell > cat minishell >	0	Yes
CTRL+C	minishII >^C minisheII >	130	Yes
CTRL + D	minishell > exit	0	Yes
CTRL+\	minishell >	0	Yes
<< end > (CTRL + C)	> ^C minishell >	130	
<< end > (CTRL + D)	> ./minishell: warning minishell >	0	1
<< end > (CTRL + \)	Nothing	1	

Env:

Case	Expected Output	\$?	Required
env	Should print the environment	0	Yes
echo \$SHLVL ./minishell echo \$SHLVL	first echo will output current shell lvl second will output SHLVL + 1	0	Yes
export SHLVL=999 ./minishell	minishell > ./minishell: warning: shell level (1000) too high, resetting to 1 *echo \$SHLVL = 1*	0	Yes
export SHLVL=(neg num) ./minishell echo \$SHLVL	0	0	Yes
cd echo \$OLDPWD	The previous pwd	0	
Cd echo \$PWD	the current pwd	0	
env + test/	./minishell: test: No such file or directory	127	
env + src/	./minishell: src: Permission denied	126	
env + Makefile/	./minishell: Makefile: Not a directory	126	
env + (anything)	./minishell: 'fjl': No such file or directory	127	

Echo:

Case	Expected Output	\$?	Required
echo -n -nn -nnwn test -nnn	–nnwn test –nnnminishell >	0	Yes
echo -n-nnn-nnn-n djfk	-n-nnn-nnn-n djfk minishell >	0	Yes
echo -nnen -n tes	Testminishell >	0	NO
echo test	test minishell >	0	Yes
echo ~ == echo \$HOME	\$HOME	0	NO
echo \$PATH	\$PATH	0	Yes
echo \$non_exist	\n minishell >	0	Yes

Cd:

Case	Expected Output	\$?	Required
cd//////// pwd	1	0	Yes
cd	\$HOME	0	Yes
cd + (~ or)	\$HOME	0	
mkdir a mkdir a/b cd a/b rm –r//a cd	./minishell: error retrieving current directory: getcwd: cannot access parent directories: No such file or directory	0	Yes
cd Makefile/	./minishell: cd: no such file or directory	1	Yes
cd test	./minishell: cd: no such file or directory	1	Yes
cd a fs	minishell: cd: too many arguments	1	Yes

Unset:

Case	Expected Output	\$?	Required
unset USER	Removes USER env	0	Yes
unset USER PATH	Removes USER and PATH envs	0	Yes
unset "" test	minishell >	0	
unset " test	minishell >	0	
unset (any thing)	minishell >	0	

Exit:

Case	Expected Output	\$?	Required
exit -42	exit bash>	214	Yes
exit 9223372036854775808-	exit minishell: exit: 9223372036854775808- : numeric argument required bash>	2	Yes
exit -9223372036854775808	exit bash>	0	Yes
exit 9223372036854775808	exit ./minishell: 9223372036854775808: numeric argument required bash>	2	Yes
exit 1 abcd	exit minishell: exit: too many arguments	1	Yes
exit -+-42	exit ./minishell: -+-42: numeric argument required bash>	2	Yes
exit 1234 134 432	exit ./minishell: : too many arguments	1	Yes
exit 12WW24 43 432 532	exit ./minishell: 13f14: numeric argument required bash>	2	Yes
exit 123 34HELLO 52fds3	exit ./minishell: : too many arguments	1	Yes

Extra cases:

Case	Expected Output	\$?	Required
/bin/echo shoaib	shoaib	0	Yes
cat /dev/urandom ./minishell	Should creat random files	•	
cat wfeh cat csijdsji cat nfwir	The error change every time	•	

pipe:

Case	Expected Output	\$?	Required
cat cat cat Is	Press enter 3 times	0	Yes
cat Makefile grep pr head -n 5 cd file_not_exit	./minishell: cd: no such file or directory	1	Yes
cat Makefile grep pr head -n 5 hello	./minishell: hello: Command not found	127	Yes
ls exit 42 echo shoaib	shoaib	0	Yes
exit 1 exit 255 exit 42	minishell >	42	Yes
cat Makefile base64 xxd -p xxd -r -p base64decode	cat Makefile	0	Yes
cat Makefile cat -e cat -e cat -e cat -e cat -e cat -e cat -e cat -e	\$	0	Yes
yes yes head -n 10000000 wc	10000000 10000000 40000000	0	Yes
echo	\n minishell >	0	Yes

Redir:

Case	Expected Output	\$?	Required
> test Is	creat test & the result of Is should include test folder	0	Yes
exit 42 > file	exit & creat file bash>	42	Yes
cat -e > test1 < test2	error: test2 does not exist	1	Yes
echo -nnnnn > out1 -nn>>o2 hi cat out1 cat o2	out1: o2:hellominishell>	0	Yes
cat <<123 -e <<234 It should be work like bash	cat will read from 234 with -e option and output to out	0	Yes
>/	error opening output file: Is a directory	1	Yes
ls> test1 > test2 -l>test3 -a	test1: test2: test3: result of ls -l -a	0	Yes

Expander:

Case	Expected Output	\$?	Required
echo \$0\$1230\$0	./minishell230./minishell	0	Yes
" s - "	./minishell: Is -l: Command not found	127	Yes
"" s - ""	Work as expect	0	Yes
> "out ">>" out2"	Creat file 'out ' && ' out2'	0	Yes
\$non_exist	minishell >	0	Yes
"e"cho shoaib	shoaib minishell >	0	Yes

Export:

Case	Evnoeted	\$?	Poquired
Case	Expected	4	Required
	Output		
export x1="abcd" x2="123" x3"shoaib"	Must add x1 x2 to envs and to export ,x3 just in export and show like this: declare -x x3shoaib	0	Yes
export 1x	export: `1c': not a valid identifier	1	Yes
export test="123" 1test="test" test3="abcd"	export: `1test=test': not a valid identifier it will add test and test3 to export and env	1	Yes
export test_empty bash export	All envs except test_empty	0	Yes
export var=a export \$var=test echo \$var \$a	a test	0	Yes
export test1 env	You will not see test1 in "env", but you will it in "export"	0	Yes
export test2= env	You will see test2 in "env" and "export"	0	Yes
export test - export export test=shoaib - export	test="shoaib"	0	Yes
export test=\$HOME - export	test=/home/user 42	0	Yes
export x="s -l -a "	It should work	0	Yes
export x=" s -l -a"	./minishell: I: Command not found	127	Yes
export \$non_exist	Should run export	0	Yes
export \$non_exist=	export: `=': not a valid identifier	1	Yes

Export with expander:

Case	Expected Output	\$?	Required
export "" test=a	export: `': not a valid identifier	1	Yes
export var=" shoaib" echo \$var cat –e	[shoaib\$]	0	Yes
export var="shoaib" echo \$var cat –e	[shoaib\$]	0	Yes
echo "\$tests""Makefile"	[Makefile]	0	Yes
echo "\$tests"Makefile	[Makefile]	0	Yes
echo "\$tests" "Makefile"	[Makefile]	0	Yes
export test=" shoaib ft " echo \$test	[shoaib ft]	0	Yes
export test=" shoaib ft " echo ab\$test	[ab shoib ft]	0	Yes
export test=" shoaib ft " echo "ab"\$test	[ab shoib ft]	0	Yes
export test=" shoaib ft " echo ""\$test""	[shoaib ft]	0	Yes
export test=" shoaib ft " echo """\$test"""	[shoaib ft]	0	Yes
export "test=shoaib"=ft echo \$test	shoaib=ft	0	Yes
export test=" " echo \$test \$test \$test abcd \$non_exist \$test 123 \$test	[abcd 123]	0	Yes
export test=" abcd 123 " 1.echo \$test "\$test" 2. echo \$test"\$test" 3 .echo "\$test" \$test 4 .echo "\$test"\$test 5 .echo "\$test"v\$test 6. echo \$testv"\$test"	1.[abcd 123 abcd 123] 2.[abcd 123 abcd 123] 3.[abcd 123 abcd 123] 4.[abcd 123 abcd 123] 5.[abcd 123 v abcd 123] 6.[abcd 123]	0	Yes
export x=" ismail" 1.echo \$x 2.echo "\$x"	1.[ismail] 2.[ismail] 3.[ismail]	0	Yes

3.echo ""\$x""	4.[ismail ismail]	
4.echo "\$x"\$x	5.[ismail ismail]	
5.echo \$x "\$x"		
* Check the same cases but on x="ismail "	*	