IF ACCOUNT TYPE IS ADMIN

GET ACCOUNT TYPE

SET USERNAMES, PASSWORDS

SET USER/PASS ATTEMPT COUNTERS TO 0

SET CORRECT USER/PASS BOOLEANS TO FALSE

START

ELSE

ELSE

ELSE

YES

BUMP USER ATTEMPT COUNTER

YES

IF CORRECT USER IS FALSE

SET CORRECT USER BOOL TRUE IF INPUT USERNAME IS CORRECT. OTHERWISE FALSE

GET INPUT USERNAME

YES

WHILE CORRECT USER BOOL IS FALSE AND USER ATTEMPTS IS LESS THAN 3

YES

“Invalid Username”

END

IF PASS ATTEMPT COUNTER IS 3

ELSE

END

“Contact Administrator”

YES

IF PASS ATTEMPT COUNTER IS 3

ELSE

END

YES

“Welcome Admin! You can update and read files.”

IF CORRECT PASS IS TRUE

ELSE

YES

ELSE

YES

YES

BUMP PASS ATTEMPT COUNTER

GET INPUT PASSWORD

SET CORRECT PASS BOOL TRUE IF INPUT PASSWORD IS CORRECT. OTHERWISE FALSE

IF CORRECT PASS IS FALSE

WHILE CORRECT PASS BOOL IS FALSE AND PASS ATTEMPTS IS LESS THAN 3

IF CORRECT USER IS TRUE

IF ACCOUNT TYPE IS STUDENT

WHILE CORRECT USER BOOL IS FALSE AND USER ATTEMPTS IS LESS THAN 3

YES

GET INPUT USERNAME

ELSE

SET CORRECT USER BOOL TRUE IF INPUT USERNAME IS CORRECT. OTHERWISE FALSE

IF CORRECT USER IS FALSE

BUMP USER ATTEMPT COUNTER

YES

YES

ELSE

ELSE

END

“Invalid Username”

YES

IF PASS ATTEMPT COUNTER IS 3

ELSE

END

“Contact Administrator”

YES

IF PASS ATTEMPT COUNTER IS 3

ELSE

END

YES

“Welcome Student! You can only read files.”

IF CORRECT PASS IS TRUE

ELSE

YES

ELSE

YES

YES

BUMP PASS ATTEMPT COUNTER

IF CORRECT PASS IS FALSE

SET CORRECT PASS BOOL TRUE IF INPUT PASSWORD IS CORRECT. OTHERWISE FALSE

GET INPUT PASSWORD

WHILE CORRECT PASS BOOL IS FALSE AND PASS ATTEMPTS IS LESS THAN 3

IF CORRECT USER IS TRUE

ELSE

ELSE

YES

YES

BUMP USER ATTEMPT COUNTER

IF CORRECT USER IS FALSE

SET CORRECT USER BOOL TRUE IF INPUT USERNAME IS CORRECT. OTHERWISE FALSE

GET INPUT USERNAME

YES

WHILE CORRECT USER BOOL IS FALSE AND USER ATTEMPTS IS LESS THAN 3

IF ACCOUNT TYPE IS STAFF

END

YES

“Welcome Staff! You can update, read, add, and delete files.”

IF CORRECT USER IS TRUE

WHILE CORRECT PASS BOOL IS FALSE AND PASS ATTEMPTS IS LESS THAN 3

GET INPUT PASSWORD

SET CORRECT PASS BOOL TRUE IF INPUT PASSWORD IS CORRECT. OTHERWISE FALSE

IF CORRECT PASS IS FALSE

BUMP PASS ATTEMPT COUNTER

YES

YES

ELSE

YES

ELSE

IF CORRECT PASS IS TRUE

ELSE

IF PASS ATTEMPT COUNTER IS 3

YES

“Contact Administrator”

END

ELSE

IF PASS ATTEMPT COUNTER IS 3

YES

“Invalid Username”

END