**Lab 10**

**WAP to program to check c identifiers**

**Source Code:**

states = ['q0','q1','q2']

string = input("Enter the identifier ")

state = states[0]

lstring = list(string)

specialCharacters = [' ', ';', ':', ',', '/', '\\', '.','@']

keywords = ['auto', 'double', 'int', 'struct', 'break', 'else', 'long', 'switch', 'case', 'enum', 'register', 'typedef', 'char', 'extern', 'return', 'union', 'continue', 'for', 'signed', 'void', 'do', 'if', 'static', 'while', 'default', 'goto', 'sizeof', 'volatile', 'const', 'float', 'short', 'unsigned']

if(string in keywords):

print("An identifier cannot be a keyword")

else:

for i in range(len(string)):

if ((state == states[0]) and ((lstring[i].isalpha()) or lstring[i]=='\_')):

state = states[1]

elif (state == states[1] and lstring[i] in specialCharacters):

state = states[2]

elif ((state == states[1]) and ((lstring[i].isalpha()) or (lstring[i]=='\_') or (lstring[i].isdigit()))):

state = states[1]

if (state == states[1]):

print("The identifier has been accepted")

else:

print("The identifier has not been accepted")

**Output:**

****

****

****

**Conclusion:**

Thus, program to check c identifiers can be written as above.