Sindh Madressatul Islam University (SMIU)

Program: BSCS (Even)

Subject: Theory of Automata

Instructor: Mustafa Ali Bamboat

Assignment – 2

Due Date: 31-Oct-2023 (7th Week)

Q1. Build an FA accepting the Language L of Strings, defined over Σ = {a, b}, **beginning with and ending in same letters**

[2 Marks]

Q2. Using the technique discussed by Martin, build an FA accepting the following language

L = {w belongs to **{a,b}***: length(w) >= 2 and second letter of w, from right is a}.

[2 Marks]

Q3. Using the technique discussed by Martin, build an FA accepting the following language

L = {w belongs to **{a,b}:** w neither ends in **ab** nor **ba**}.

[2 Marks]

Q4. Build a TG accepting the language of strings, defined over Σ={a, b}, **ending in b.**

[2 Marks]

Q5. Build a TG accepting the language L of strings, defined over Σ={a, b}, **beginning with and ending in the same letters.**

[2 Marks]