**BRAC University**

**Dept. of Computer Science and Engineering**

**Fall 2024**

**CSE331 - Assignment 2**

**Deadline: January 04 11:45 PM**

1. **Use the pumping lemma to demonstrate that the following languages are not regular.**
   1. L = { w ∈ {0,1}\* : wwR and wR means w in reverse}
   2. L = { w ∈ {a,b}\* : w = bnam where n＞m ,m ≥ 0}
   3. L = { w ∈ {0,1,2,3}\* : w = 1n0m3n2m where n,m ≥ 0}
   4. L = { w ∈ {0,1}\* : w = 1n: n is a power of three}