1. *Show that forms a group under matrix multiplication.*
2. Let (G,o) be a group and a.If O(a)=n then for m O(.
3. *Show that is cyclic group under multiplication. Find its generators.*
4. Prove that SL(n,R) is normal subgroup of GL(n,R).
5. Let (G,o) be a group in which .Show that H= is a normal subgroup of G.
6. If O(G)= ,where p is prime then show that G is abelian.
7. State and proof Lagrange’s theorem.
8. Prove that every non zero element in a finite ring having no divisor of zero is a unit.
9. Let R be a ring with unity I and if there exist a unique b in R such that ab=I. Prove that ba=I too and a is a unite.