System programming Lab. All programs are to be written using IBM 360 Assembly.

Q1. Write a program in IBM 360 assembly to search a list for a given number? The number to be searched is stored in register 2.

Q2. Write a program to add numbers in 20 consecutive locations and store the sum in register 4.

Q3. Write a program to multiply each data element stored in 10 consecutive memory locations by 10 and store them at another location (assume location 1000) in the memory.

Q4. Given a number in register 2, add square of that number to each element in a list of 30 consecutive numbers.

Q5. Generate a sequence 1, 2, 3, ... ,20 and store it in memory locations starting at 100.

Q6. Generate a sequence 1, 4, 9, ..., 100 and store it in memory locations starting at 500.