

## ASSIGNMENT 6(FORTRAN IMP QN)

1. Explain FORTRAN structure. What are the data types of FORTRAN.
2. What are the characteristics of FORTRAN programming.
3. Compare logical If and Arithmetic If statement in FORTRAN with example.
4. Compare Unconditional and Computed goto in FORTRAN with example.
5. Compare Do and implied Do statement in FORTRAN with example.
6. Rewrite program from example 1.50 to 1.60 from this note:

```
Enter a number:11
Enter a number:12
Enter a number:13
Enter a number:14
The average value is: 12.

The deviation from each number from average is:
number: 10 deviation: -2.
number: 11 deviation: -1.
number: 12 deviation: 0.
number: 13 deviation: 1.
number: 14 deviation: 2.

Example 1.50: Write a program to display following pattern
upto n lines

*
**
***
****
*****

program pattern
integer n,i,j
write(*,*) 'Enter a number:'
read(*,*) n
do i=1,n
write(*,*) ('*',j=1,i)
enddo
stop
end
```

```
K=1
write(*,*) 'Enter a number:'
read(*,*) n
do i=1,n
write(*,*) (i,j=1,i)
enddo
stop
end
```

Example 1.52: Write a program to find maximum number among five numbers

```
program array
integer num(5),i,max
do i=1,5
write(*,*) 'Enter a number:'
read(*,*) num(i)
enddo
max=num(1)
do i=1,5
if(max.LT.num(i)) then
max=num(i)
endif
enddo
write(*,*) 'The maximum number is:',max
end
```