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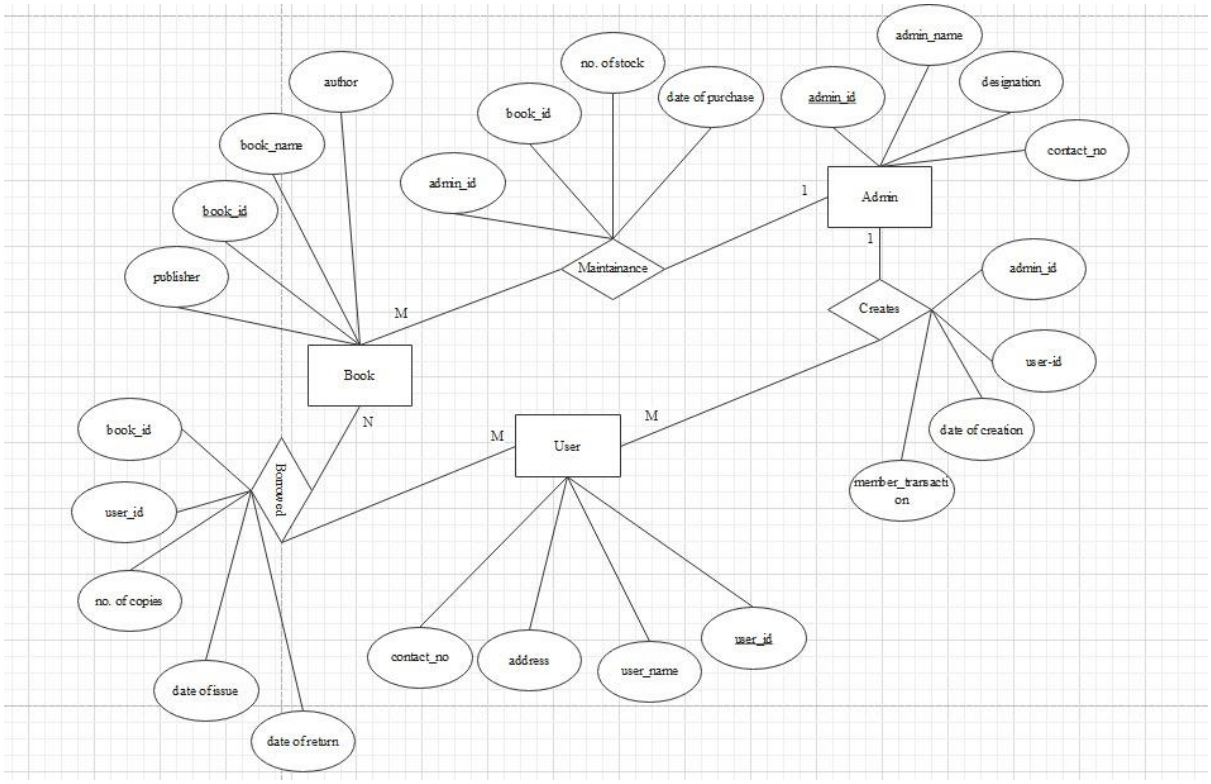
Semester:5th Sem

Software Engineering Lab (ESC-591)

1.Design a Entity Relationship Diagram for a Library Management System.

Ans:-



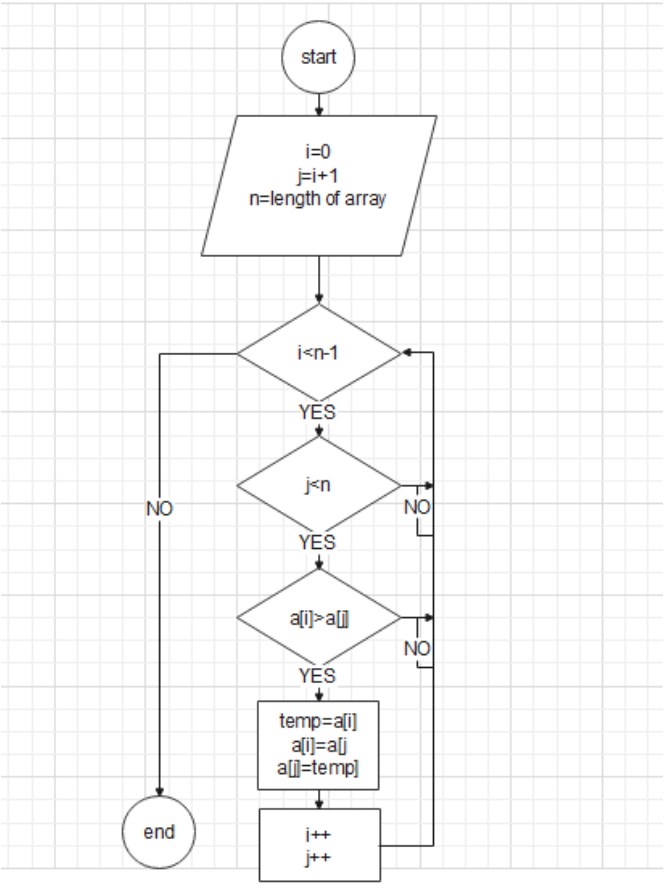
Q3.

Consider the following program statement:

```
void sort(int a[], int n)
{
    int i, j, temp;
    for (i=0;i<n-1;j++)
    for (j=i+1;j<n;j++)
    if (a[i]>a[j])
    {
            temp=a[i];
            a[i]=a[j];
            a[j]=temp;
    }
}
```

a. Draw the control flow graph for this program segment.
b. Determine the Cyclomatic complexity for this program.

a.



b. The cyclometric complexity for this program is:

V(G)=E-N+2 where V(G)is the cyclometric complexity & E is the number of total edges and N is the number of nodes in control flow graph.

V(G)= E-N+2

=10-8+2

=4

So, the number of cyclometric complexity is 4.