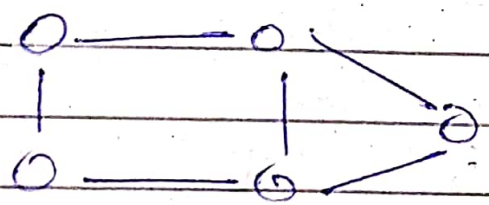
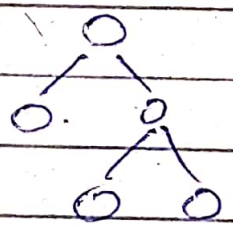
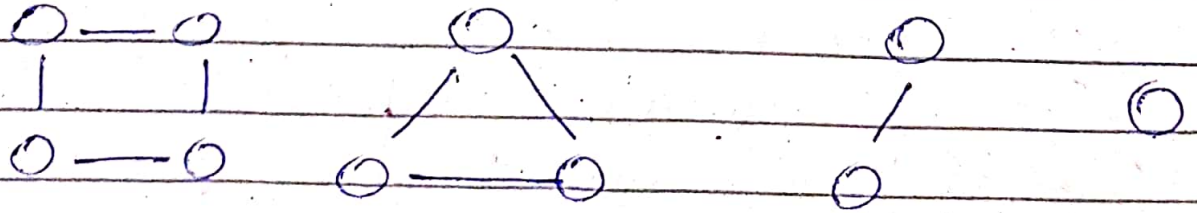
Connected Components

*) Following two are the connected graphs:-





*) Lets have the following graph



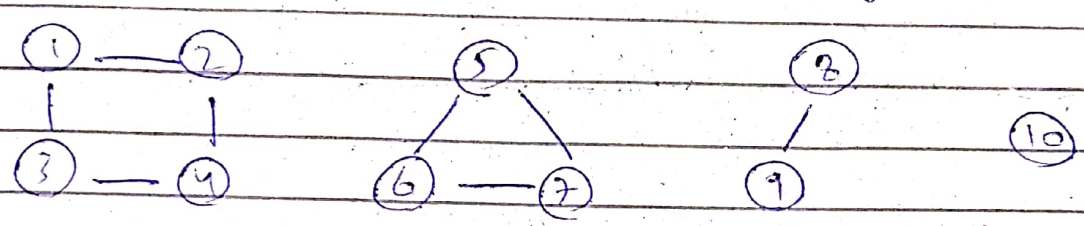
There 4 graphs can they be one single graph
But if we number them like the following

If N = 10, m = 8

Inputs are:

1 — 2
1 — 3
2 — 4
3 — 4
5 — 6
6 — 7
5 — 7
8 — 10

So isn't this the following graph



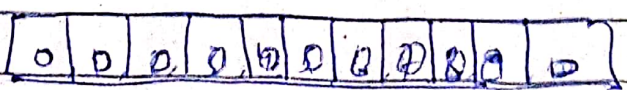
So there are 4 components of a single graph according to the question.

These can be different graphs but depend on the question.

2) If we have to traverse this graph then if we start from (1) we cannot reach (5) so we have to solve this problem.

> So any traversal we do, we will use "Visited Array" concept.

So,




```
for(i=1; i<=N; i++){
    if (!visited)
        traversal(i);
}
```