2 1. write an algo. and prepare a flowchart to display the table ?

ans =>

```cpp
# include <iostream>
using namespace std;

int main ()
    int n;
    cout << "Enter a number:";
    cin >> n;

    for (int i = 1; i <= n; ++i) {
    for (int j = 1; j <= 10; ++j) {

        cout << j << "x" << i << "=" << j*i;

        if (j != 10) {
        cout << ",";
        }
        else {
        cout << endl;
        }
    }
    }

}
```

FLOW CHART :-

```
                    ( START )
                        |
                        v
                  / input a,b /
                        |
                        v
                +-------------+
        +------>|  i=a, j=1   |
        |       +-------------+
        |              |
        |              v
        |        / Print /
        |              |
        |              v
        |       +-------------+
        |       |    j++      |<--------+
        |       +-------------+         |
        |              |                |
        |              v                |
        |            /     \            |
        |          /  j<=10  \   TRUE   |
        |          \         /----------+
        |            \     /
        |              |
        |            False
        |              v
        |       +-------------+
        |       |    i++      |
        |       +-------------+
        |              |
        |              v
        |            /     \
        +-----------/  i<=b  \
          TRUE      \         /
                      \     /
                        |
                      False
                        v
                    ( END )
```
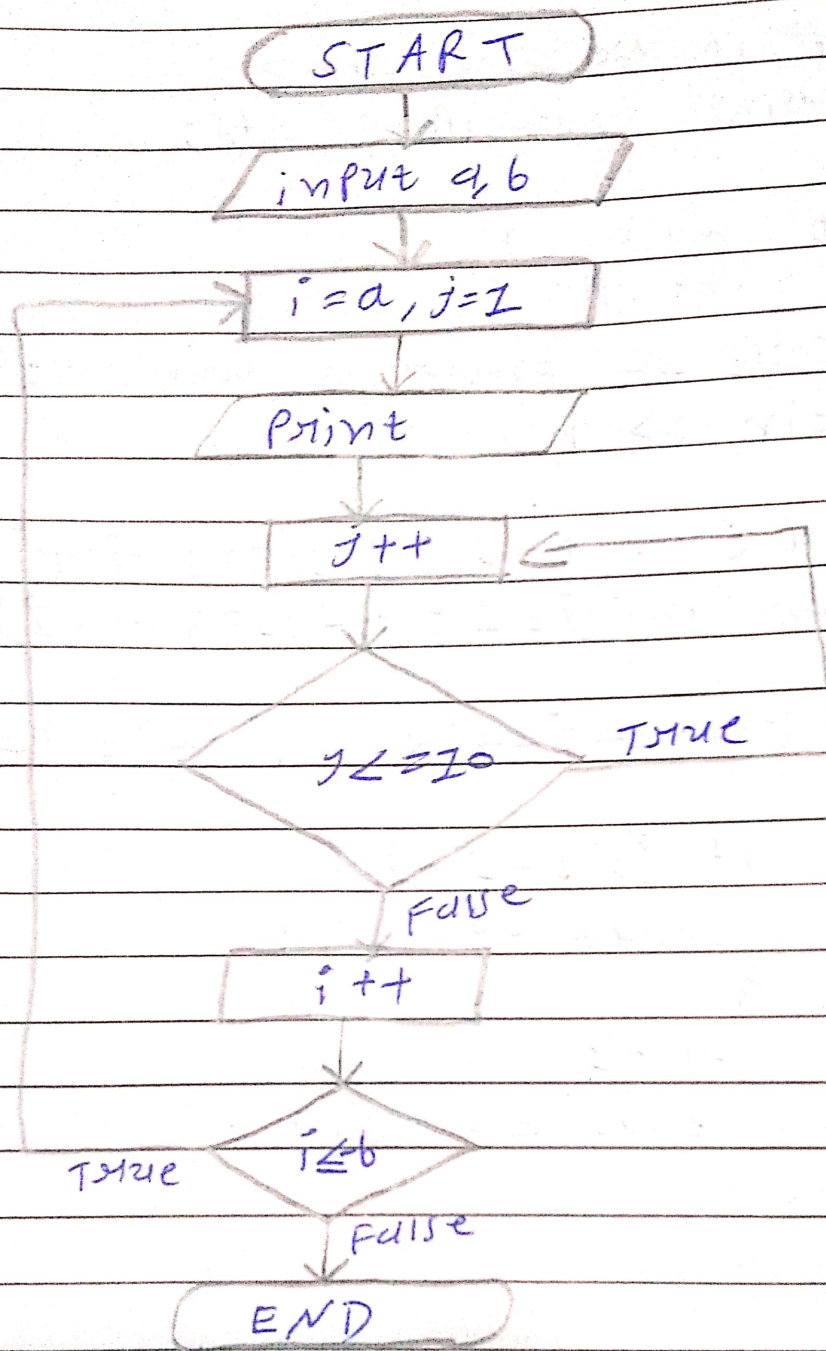
Q.2 write a algo and prepare a flowchart to display fibonacci series. ?

ans ⇒

```cpp
#include <iostream>
using namespace std;

int main ()
{
    int  t1 = 0, t2 = 1, t3 = 0, n;

    cout << " Enter a number";
    cin >> n;

    for (int i = 1; i <= n; ++i) {
        if ( i == 1) {
            cout << t1 << ",";
            continue;
        }
        if (i == 2 ) {
            cout << t2 << ",";
            continue;
        }
        t3 = t1 + t2;
        t1 = t2
        t2 = t3

        cout << t3 << ",";
    }
}
```

Flow Chart

```
                    ┌─────────────┐
                    │    START    │
                    └──────┬──────┘
                           ▼
          ┌────────────────────────────────────┐
          │  n1=0, n2=1, n3, n, I              │
          └────────────────┬───────────────────┘
                           ▼
              ╱───────────────────────╲
              ╲      input  N          ╱
                           ▼
              ╱───────────────────────╲
              ╲   print  n1 & n2       ╱
                           ▼
              ┌───────────────────────┐
              │        i = 1          │
              └───────────┬───────────┘
                          ▼
                     ◇─────────◇
                    ╱   i<=n    ╲──────── NO ──────┐
                    ╲           ╱                  ▼
                     ◇─────────◇            ┌─────────────┐
                          │                 │    STOP     │
                         yes                └─────────────┘
                          ▼
              ┌───────────────────────┐
              │    n3 = n1 + n2        │
              └───────────┬───────────┘
                          ▼
              ╱───────────────────────╲
              ╲      Print  n3         ╱
                          ▼
          ┌────────────────────────────────────┐
          │  n1=n2, n2=n3   ++i                │
          └────────────────────────────────────┘
```