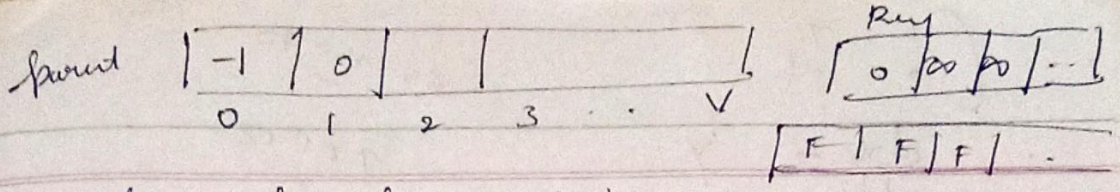
Prim's algorithm:

```
#include<limits.h>   → for obtaining infinity
#include<stdbool.h>  → include boolean datatype
int main()
{
    int graph[][] = ...

    primMST(graph)

    return 0
}
void primmst(int graph[V][V])
{
    int parent[V]
    int key[V]
    bool mstset[V]   → To check if vertex has been included
    for(int i=0; i<V; i++)
    {
        key[i] = INT_MAX
        mstset[i] = false
    }
    key[0] = 0
    parent[0] = -1
    for(int count=0; count<V; count++)
    {
        int u = minkey(key, mstset)
        mstset[u] = true

        for(int v=0; v<V; v++)
            if(graph[u][v] && mstset[v]==false graph[u][v]<
            {
                parent[v] = u
                key[v] = graph[u][v]
            }
        }
        printmst(graph)
}
```




```
int minKey(int key[], bool mstSet[])
{
    int min = INT_MAX
    min_index
    for (int v=0; v<V; v++)
        if (mstSet[v]==false && key[v] < min)
        {
            min = key[v]
            min_index = v;
        }
    return min_index
}
```

Here approach used here is the *

assign

```
void printMST(int parent[], int graph[V][V])
{
    printf("Edge \t Weight \n");
    for (int i=1; i<V; i++)
        printf("%d - %d \t %d \n", parent[i],
               i, graph[i][p]
                          parent[i]
```

key[v])