```
#include<stdio.h>

int parent[50], rank[50];

/* function prototype */
void link(int x, int y);

void makeset(int x)
{
   parent[x] = x;
   rank[x] = 0;
}

int findset(int x)
{
   if (x != parent[x])
      parent[x] = findset(parent[x]);   // fixed ; instead of :

   return parent[x];
}

void unionset(int x, int y)
{
   link(findset(x), findset(y));   // fixed finset + ;
}

void link(int x, int y)
{
   if (x != y)
   {
      if (rank[x] > rank[y])
         parent[y] = x;
      else
         parent[x] = y;

      if (rank[x] == rank[y])
         rank[y] = rank[y] + 1;
   }
}

int main()
```

```
{
    makeset(0);
    makeset(1);
    makeset(2);
    makeset(3);
    makeset(4);
    makeset(5);
    makeset(6);

    unionset(0, 1);
    unionset(1, 2);
    unionset(3, 4);
    unionset(5, 6);
    unionset(4, 5);
    unionset(2, 6);

    for (int i = 0; i < 7; i++)
        printf("%d ", parent[i]);

    return 0;
}
```