C program to count distinct elements in an array.

Algorithm:

1. Start

2. Input n

3. Repeat step 3

      for(i=0; i<n; i++)

         input a[i]

4. Repeat through Step 4

  4.1 for(i=0; i<n; i++)

     4.1 a) p = a[i]

     4.1 b) flag = 0

     4.1 c) Repeat through Step 4.1c.

         for(j=0; j<n; j++)

         { if(j != i)

           { flag ++

             break }

           }

     4.1 d) if(flag == 0)

         count ++

5. Print count

6. Stop.

```
                    ( Start )
                       |
                       v
              / Input n /
                       |
      false            v
  <----------< for i>0; i<n; i++ >
  |                    |
  |                    v True
  |              / Input a[i] /
  |                    |
  |                    v
  |    <----< for i>0; i<n; i++ >----<
  |    |              |              |
  |    |              v True         |
  |    |          | P = a[i] |       |
  |    |              |              |
  |    |              v              |
  |    |          | flag = 0 |       |
  |    |              |              |
  |    | false        v              |
  |    | <--< for j>0; j<n; j++ >--<  |
  |    |              |           |  |
  |    |              v True      |  |
  |    |            / if \  False |  |
  |    |           <  j!=i  >----->  |
  |    |            \    /          |
  |    |              | True        |
  |    |              v             |
  |    |            / if \   False  |
  |    |           < p==a[j] >------>
  |    |            \     /
  |    |              |
  |    |              v
  |    |          | flag++ |
  |    |              |
  |    |              v
  |    |          | break |
  |    |              |
  |    |              v
  |    |            / if \   false
  |    >-->       < flag==0 >------>
  |                  \    /         |
  |                    | True       |
  |                    v            |
  |               | count |         |
  |                    |            |
  +--------------------+            |
                       |            |
                       v            |
          / print count /---------->( stop )
```