

To create a control array, add a checkbox control to the form. Specify any name, e.g. chkMice. Add the second checkbox control to the form. Specify the same name as the first i.e. chkMice. You will get a message box as shown below. Click Yes, to create a control array.

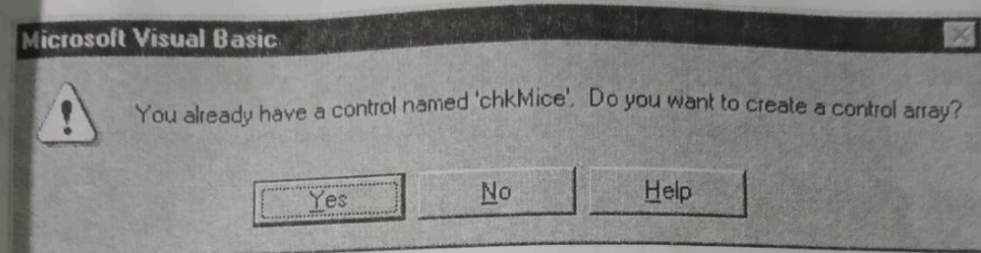


Figure 2.1 : Control array dialog

2.9 ARRAYS

An array is a contiguous collection of storage locations that are defined by a single name and each element referenced by a number, the subscript.

In order to define an array the following syntax can be used:

-

DIM NO (1 to 10) as integer

Will define an array of 10 elements subscripted from 1 to 10.

form1.cls ' to clear the form

For k = 1 to 10

 NO[k] = k + 100

 Print NO(k)

Next k

-

DIM iNO (10) as integer

Will define an array of 11 elements subscripted from 0 to 10.

✓ DIM strName (10 to 20) as string
Will define an array of 11 elements subscripted from 10 to 20.

```
form1.cls
For k =10 to 20
  strName (k)= "Mice" & k
  print strName(k)
next
```

2.9.1 Defining Dynamic Arrays

Dynamic arrays are arrays whose size is set at run-time. The size is set at runtime using the REDIM statement.

- Create a form and include a command button (Name :cmdDynamic, Caption Dynamic Array).
- ✓ In the General declaration
Dim dArray () as integer
- Add the code to cmdDynamic_Click()

```
ReDim dArray(1 to 10) as integer
```

```
Dim k as integer
```

```
For k = 1 to 10
```

```
  dArray(k) = k
```

```
  Print dArray(k)
```

```
Next
```

```
ReDim dArray (1 to 5) as integer
```

```
For k =1 to 5
```

```
  Print dArray(k)
```

```
Next
```

(Output will be numbers 1 to 10)

(No output will be seen as ReDim will destroy the earlier data)

Preserve

If preserve is used with ReDim then the earlier data is retained.

ReDim dArray(1 to 10) as integer

Dim k as integer

For k = 1 to 10

dArray(k) = k

(Output will be numbers 1 to 10)

Print dArray(k)

Next

ReDim PRESERVE dArray (1 to 5) as integer

For k = 1 to 5

(Numbers 1 to 5 will be printed.)

Print dArray(k)

This is the original data)

Next

2.9.2 Multi-Dimensional Arrays

Dim no (10) as integer declares a one-dimensional array.

Dim iNo(0 to 3,1 to 3) declares a two-dimensional array.

These are the elements of the array named, iNo ;

iNo (0,1) iNo(0,2) iNo(0,3)

iNo (1,1) iNo(1,2) iNo(1,3)

iNo (2,1) iNo(2,2) iNo(2,3)

iNo (3,1) iNo(3,2) iNo(3,3)

Handwritten notes showing a grid of indices for a 2D array:

```

    1 2 3
  0
  1
  2
  3
  
```