

ITEM 16 : Use same form in new & delete.

→ string \* Array = new string [100];

→ delete Array;

Everything looks fine but there is a problem.

How delete works →

- ① One or more destructors are called for the memory.
- ② Memory is deallocated.

In the above delete Array gives undefined behaviour since Array is not a single object it is an array of object.

Delete should know how many time the destructor needs to be called.

① string \* Array 1 = new string;

delete Array 1; // Single obj destructor called.

② string \* Array 2 = new string [10];

delete[] Array 2; // Destructor for 10 objects called.

Deletes an array of object.



if we use `delete [] array`, result is undefined.

→ Rule is

If you use `[]` in a new expression, you must use `[]` in corresponding delete expression. If you don't use `[]` in a new expression, don't use `[]` in matching delete expression.

→ Avoid using typedef for array types.

```
typedef string Add[4];
```

```
string *pal = Add;
```

```
delete pal ; // undefined
```

```
delete[] pal ; // fine
```

Instead we can use `vector<string>`