

Problem Statement -fastcopy

Objective: To copy list of array values from source to destination

Constraint:

1. At a time 8 values need to transfer from source list to destination list

2.Left over elements should copy using branching statement

Code	comments
<pre>def fast_copy(source, count): //function name fast_copy if count == 0: // initially count is 0 n = count // 8 //since 8 elements need to group, division by 8 remainder = count % 8 // remainder val will stored in var remainder src_index = 0 dst_index = 0 //both source and destination index is 0 while n > 0: dest[dst_index] = source[src_index] dest[dst_index + 1] = source[src_index + 1] dest[dst_index + 2] = source[src_index + 2] dest[dst_index + 3] = source[src_index + 3] dest[dst_index + 4] = source[src_index + 4] dest[dst_index + 5] = source[src_index + 5] dest[dst_index + 6] = source[src_index + 6] dest[dst_index + 7] = source[src_index + 7] n = n-1 return dest</pre>	<p>starting from 0th index to 7 th index all elements are copied from src to dest */</p>

```
src_index += 8    // source index 8th element need to copy to destination index
dst_index += 8
```

```
If remainder >= 1
```

```
    dest[dst_index] = source[src_index]
    source[src_index] = source[src_index] + 1    /*Remainder value is
    dest[dst_index] = dest[dst_index] + 1        checked using if condition and
                                                remaing leftover elements
                                                will be copied from source
                                                to destination*/
```

```
if remainder >= 2
```

```
    dest[dst_index] = source[src_index]
    source[src_index] = source[src_index] + 1
    dest[dst_index] = dest[dst_index] + 1
```

```
if remainder >= 3
```

```
    dest[dst_index] = source[src_index]
    source[src_index] = source[src_index] + 1
    dest[dst_index] = dest[dst_index] + 1
```

```
if remainder >= 4
```

```
    dest[dst_index] = source[src_index]
    source[src_index] = source[src_index] + 1
    dest[dst_index] = dest[dst_index] + 1
```

```
if remainder >= 5
```

```
    dest[dst_index] = source[src_index]
    source[src_index] = source[src_index] + 1
    dest[dst_index] = dest[dst_index] + 1
```

```
if remainder >= 6
```

```
    dest[dst_index] = source[src_index]
```

```
source[src_index ] = source[src_index ] +1  
dest[dst_index ]=dest[dst_index ]+1
```

```
if remainder>=7
```

```
    dest[dst_index ] = source[src_index ]  
    source[src_index ] = source[src_index ] +1  
    dest[dst_index ]=dest[dst_index ]+1
```

by
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