

```
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;zzz0001
;xuechaoli.asm
; Dr. Li helped me debug a syntax error in my “for” loop. ;I used Wikipedia.org to learn how a
genetic algorithm works.
;I spoke with Bob Smith in the class about identifying objects in Assembly Language.
```

```
.386
```

```
.model flat,stdcall
```

```
.stack 4096
```

```
ExitProcess proto,dwExitCode:dword
```

```
.data
```

```
    shift dword 3
```

```
    input byte 5,0ah,3,6,0ch
```

```
    output byte .....
```

```
.code
```

```
    main proc
```

```
        ;This loop will iterate length - shift times. ;(this loop will
        place the 'non-wrapped' values) ;Start reading from input at
        0 ;Start writing at shift
```

```
    ll:
```

```
        ;Move the value from input into al
```

```
        ;Move the value from al into output
```

```
        ;Increment the input index
```

```
        ;Increment the output index
```

```
    loop ll
```

```
;This loop will iterate shift times
;Start writing at index 0
;Start reading at index length - shift. ;(this loop will
place the 'wrapped' values)
```

l2:

```
;Move the value from input into al
;Move the value from al into output
;Increment the input index
;Increment the output index
```

loop l2

;You are encouraged to create a third loop to inspect the elements in your array.

```
invoke ExitProcess, 0
```

```
main endp
```

```
end main
```