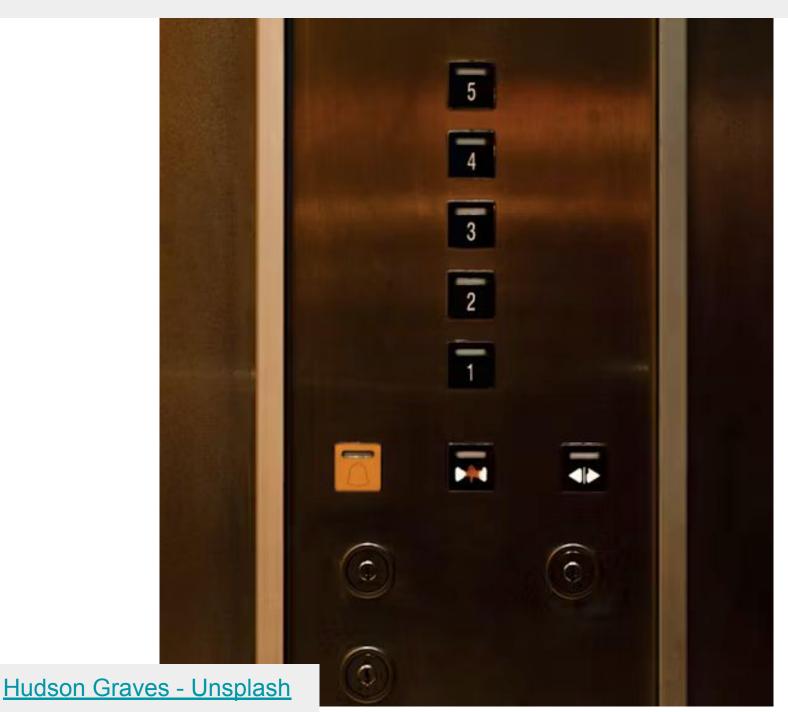
bash scripting – arrays

Adapted from materials by Dr. Carrier



Creating & manipulating arrays

Creation:

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arr=() # Empty array
declare -a arr_2 # Also empty
arr_3=(10 8 6) # Create with values
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Set / add values:

```
arr[0]=test  # Set value
arr_2+=(87)  # Append value
arr_3+=(4 2)  # Append values
```

Accessing arrays

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Special accessing:

```
$\{\arr[@]\}  # All elements
$\{\arr[*]\}  # All elements as string
$\{\#\arr[@]\}  # Count of elements
$\{\!\arr[@]\}  # Indices of elements
$\{\arr[@]\!start:\num\}  # Slice of array
```

Iterating over arrays

```
for x in ${arr[@]}
do
   echo "$x"
done
```

Associative arrays – maps/dictionaries

```
declare -A dnd_stats
dnd_stats=(
  [str]=16
  [dex]=10
  [con]=18
  [int]=11
  [wis]=10
  [cha]=14
echo "wisdom = ${dnd_stats[wis]}"
dnd_stats[wis]=$((dnd_stats[wis] + 2))
echo "wisdom = ${dnd_stats[wis]}"
```