

bash scripting – arrays

Adapted from materials by Dr. Carrier



Creating & manipulating arrays

Creation:

```
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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]}"
```