

```
#!/bin/bash
```

```
function sortowanie_rosnaco  
{
```

```
    for i in $@;  
    do  
        tab1[$i]="$i";  
    done
```

```
    lz="${#tab1[*]}";
```

```
    #echo "dlugosc $lz"
```

```
    tmp=0
```

```
    for(( z=1 ; $z < $lz ; z++ )) ; do  
        for(( j=$((lz-1)) ; $j >= $z ; j-- )) ; do  
            if [[ ${tab1[j-1]} -gt ${tab1[j]} ]] ; then  
                tmp=${tab1[j-1]}  
                tab1[j-1]=${tab1[j]}  
                tab1[j]=$tmp  
            fi  
        done  
    done
```

```
    echo "Liczby rosnaco: ${tab1[*]}";
```

```
}
```

```
function sortowanie_malejaco
```

```
{
```

```
    for i in $@;  
    do  
        tab2[$i]="$i";  
    done
```

```
    lz="${#tab2[*]}";
```

```
    #echo "dlugosc $lz"
```

```
    tmpz=0
```

```
    echo "Liczby : ${tab2[*]}";
```

```
    for(( z=1 ; $z < $lz ; z++ )) ; do  
        for(( j=$((lz-1)) ; $j >= $z ; j-- )) ; do  
            if [[ ${tab2[j-1]} -lt ${tab2[j]} ]] ; then  
                tmpz=${tab2[j-1]}  
                tab2[j-1]=${tab2[j]}  
                tab2[j]=$tmpz  
            fi  
        done  
    done
```

```
done
```

```
echo "Liczby posortowane malejco : ${tab2[*]}";
```

```
}
```

```
liczba=0;
```

```
i=0;
```

```
echo "Podaj liczby do sortowania"
```

```
echo "Aby zakonczyc wpisz e"
```

```
while [ "$liczba" != 'e' ]
```

```
do
```

```
read liczba
```

```
if [ $liczba = "e" ]
```

```
then
```

```
    echo "koniec wpisywania "
```

```
else
```

```
        tab[$i]="$liczba"
        tab1[$i]="$liczba"
        i=$i+1
    fi
done
echo "Liczby: ${tab[*]}";
echo "Liczby: ${tab1[*]}";
sortowanie_rosnaco ${tab[*]}
sortowanie_malejaco ${tab1[*]}
```