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(* sorts and searches - mathematica edition *)
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```
(* because you can actually do anything in mathematica *)
```

```
linear[list_, key_] :=
```

```
  For[i = 1, i < Length[list], i++, If[list[[i]] == key, Print[i]]]
```

```
linear[{"a", "b", "c", "d"}, "b"]
```

```
selection[list_] = (Print[list] ;
```

```
  For[i = 1, i < Length[list], i++, (smallest = i ; For[
```

```
    j = i + 1, j < Length[list], j++, If[
```

```
      Order[list[[j]], list[[smallest]]] > 0, smallest = j]] ; temp = list[[j]] ;
```

```
    list[[j]] = list[[smallest]] ; list[[smallest]] = temp) ; Print[list]) ;
```