

```

def bubble(nums):
    for j in range(len(nums)-1):
        for i in range(len(nums)-1-j):
            if nums[i] > nums[i+1]:
                nums[i], nums[i+1] = nums[i+1], nums[i]
    return nums

def insert(nums):
    for i in range(1, len(nums)):
        j = i-1
        while j >= 0:
            if nums[j] > nums[j+1]:
                nums[j], nums[j+1] = nums[j+1], nums[j]
            j = j-1
    return nums

def select(nums):
    for i in range(len(nums)):
        min_index = i
        for j in range(i+1, len(nums)):
            if nums[min_index] > nums[j]:
                min_index = j

        nums[i], nums[min_index] = nums[min_index], nums[i]
    return nums

def def_sort(nums):
    nums.sort()
    return(nums)

import timeit
import random as r
x = []
a = []
b = []
c = []
d = []

for i in range(1000):
    x = []
    for i in range(6):
        x.append(r.randint(1, 100))
    a.append(x)
    b.append(x)
    c.append(x)
    d.append(x)

print(a[-1], b[-1], c[-1], d[-1])

```

```
start1 = timeit.default_timer()
for i in range(len(a)):
    temp = bubble(a[i])
stop1 = timeit.default_timer()
print('bubble (ms): ', (stop1 - start1)/0.001)
```

```
start2 = timeit.default_timer()
for i in range(len(b)):
    temp = insert(b[i])
stop2 = timeit.default_timer()
print('insert (ms): ', (stop2 - start2)/0.001)
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```
start3 = timeit.default_timer()
for i in range(len(c)):
    temp = select(c[i])
stop3 = timeit.default_timer()
print('select (ms): ', (stop3 - start3)/0.001)
```

```
start4 = timeit.default_timer()
for i in range(len(d)):
    temp = def_sort(d[i])
stop4 = timeit.default_timer()
print('default (ms): ', (stop4 - start4)/0.001)
```

```
print(a[-1],b[-1],c[-1],d[-1])
```