ASSIGNMENT - 2

Array:

Function Call	Time Complexity
memset(A,0,sizeof(A))	O(sizeof(A))
sort(&A[0],&A[999])	O(1000 log 1000)
lower_bound(A[0],A[999],x)	O(log 2*1000)
upper_bound(A[0],A[999],x)	O(log 2*1000)
next_permutation(A[0],A[999])	O(1000)
prev_permutation(A[0],A[999])	O(1000)

Double_Ended_Queue:

Function Call	Time Complexity
front()	O(1)
back()	O(1)
push_front()	O(1)
push_back()	O(1)
pop_front()	O(1)
pop_back()	O(1)

Map:

Function Call	Time Complexity
insert(pair)	O(logn)
find(key)	O(logn)
count()	O(logn)
begin()	O(1)
end()	O(1)

Multiset:

Function Call	Time Complexity
begin()	O(1)
end()	O(1)
insert(element)	O(logn)

erase(iterator)	O(logn)
size()	O(1)

Pair:

Function Call	Time Complexity
sort(start iterator, end iterator)	O(nlogn)
P[i]	O(1)

Priority_Queue:

Function Call	Time Complexity
make_pair(x,y)	O(1)
push(x)	O(1)
top()	O(1)
pop()	O(1)
size()	O(1)

Queue:

Function Call	Time Complexity
front()	O(1)
back()	O(1)
push(x)	O(1)
pop()	O(1)
size()	O(1)

Set:

Function Call	Time Complexity
insert(x)	O(logn)
size()	O(1)
begin()	O(1)
end()	O(1)
count()	O(1)
erase(x)	O(logn)

Stack:

Function Call	Time Complexity
top()	O(1)
push(x)	O(1)
pop()	O(1)
size()	O(1)

Vector:

Function Call	Time Complexity
push_back(x)	O(1)
begin()	O(1)
end()	O(1)
erase(iterator)	O(n)
size()	O(1)