

Vectors

From last time remember what vectors give you:

- expandable container of variables,

of any datatype: $\text{vector} \langle \text{type of each } V[i] \rangle \ V;$

\nearrow
int, char, string...

- to append new element x :

$V.\text{push_back}(x);$

- to remove last element:

$V.\text{pop_back}();$

- to get the size (# of elements):

$V.\text{size}();$

$\underbrace{\hspace{1.5cm}}$
datatype is `size_t`

(unsigned, as large as possible)

Exercise: given a vector of integers V and a target value t ,

figure out if \exists indexes $i \neq j$ s.t. $V[i] + V[j] == t$.

\nearrow
"there exists"

\uparrow
"such that"

Example: say $V = [1 \mid 7 \mid -2 \mid 19]$

If $t = 5$, answer is "yes": $V[1] + V[2] = t$

If $t = 13$, answer is "no".

	0	1	2	3	4	5
0	///	///	///	///	///	///
1	///	///	///	///	///	///
2	///	///	///	///	///	///
3	///	///	///	///	///	///
4	///	///	///	///	///	///
5	///	///	///	///	///	///

(say $V.size() = 6$)



search space