

Homework 10

a) $\langle 3, 10, 2, 4 \rangle$

Using double hashing ~~write~~ available indexes.

0	1	2	3	4
0	0	0	0	0

for

Adding 3,

so, $3 \text{ MOD } 5 = 3$. using h_1

0	1	2	3	4
0	0	0	3	0

Adding 10

so,

$$10 \text{ MOD } 5 = 0.$$

0	1	2	3	4
10	0	0	3	0

Adding 2

so,

$$2 \text{ MOD } 5 = 2$$

0	1	2	3	4
10	0	2	3	0

Adding 4.

$$4 \text{ MOD } 5 = 4.$$

∴ Final position will be.

0	1	2	3	4
10	0	2	3	4

b) Inside file "Hosttable.cpp".

Problem 10.2

a) ~~2~~ Consider the activity.

^① ^② ^③
[[1, 5], [4, 6], [5, a]]

~~If~~ ~~cor~~ If we had used the greedy algorithm of choosing activity with shortest duration we would just choose activity 2 as others would not be possible.

But using the earliest finish date we could have got activity ① and ③ which is globally optimum.