ALGORITHMS FINAL

1. Build Heap ()
2. RBT Proof 2log(n+1)
3. Find Predecessor & Successor BST

} Qn 1

1. Use formulas to Define Universal Hashing.
   Does universal Hashing remove chances of collision?
2. Knapsack Problem.
3. Running Time for Knapsack & Explain.

} Qn 2

1. Algorithm of Dijkstra code given. Show running time is $E \log V$
2. Bellman Ford in 2020 Exam. (Past Paper)
3. Algorithms that runs on Dijkstra for negative weight edge (Past paper)

} Qn 3

1. True or False for Hard Problems

   Is Chess Problem EXP-complete?

} Qn 4

Bonus

- Subset to Knapsack as in 2015 July.

- Show how Dijkstra fails for Negative Edge graph