**Output:**

**admin@chaitanya:~/Desktop/dsa$ g++ D18.cpp**

**admin@chaitanya:~/Desktop/dsa$ ./a.out**

**\*\*\*\*\*\* PROGRAM FOR OBST \*\*\*\*\*\***

**Enter the no. of nodes : 3**

**Enter the probability for successful search :: p[1]: 1**

**p[2]: 2**

**p[3]: 3**

**Enter the probability for unsuccessful search :: q[0]: 2**

**q[1]: 1**

**q[2]: 2**

**q[3]: 3**

**Optimal BST is ::**

**w[0][3] :: 14**

**c[0][3] :: 26**

**r[0][3] :: 2**

**Left child of 2 :: 1**

**Right child of 2 :: 3**

**admin@chaitanya:~/Desktop/dsa$**