

#	Roll No	Name	PC	O/P (6)	Code						Total (40)	Comments
					Part1 (5)	Part2 (3)	Part3 (8)	Part4 (4)	Part5 (8)	main (6)		
1	14EC35030	Rajarshi Saha	101	6	5	3	7	3	8	6	38	Insufficient memory allocate to array A in findnbr. Unsafe rotate codes.
2	14EE35010	Arpit Amit Bansal	49	4	5	3	8	4	8	6	38	Output: 0 printed in preorder. Left and right children of x not printed.
3	14GG20021	Mallika Singh	47	6	5	3	8	3	5	6	36	Unsafe rotate functions. Inefficient call of findlvl in loop. This makes the running time quadratic.
4	15CS10054	Yarrabilli Sai Kiran	31	0	1	0	0	0	0	0	1	No output (program does not compile). No effort to solve the given assignment. Only 1 mark given for defining the BST data type.
5	15EC32004	Dishank Yadav	33	4	5	3	8	3	0	4	27	Incorrect output after makechild. Unsafe rotate functions. Makechild not implemented. In main, the children of x are not printed.
6	15EE10031	Pushpendra Singh Rathore	17	0	3	3	8	3	4	4	25	No output (Seg Fault). Why allocate memory to temp and temp1 in insert? Same in rotate functions and makechild. Insert at root faulty. Unsafe rotate functions. Makechild has bugs (the condition that temp→data = y or not is not important). No effort to print children of x in main. T uninitialized in main.

7	15IE10035	Archit Tekriwal	45	0	5	3	8	3	6	5	30	No output (Seg Fault). Unsafe rotate functions. Quadratic time makechild (because of search in loop). T uninitialized in main.
8	15IM3FP06	Rajshekhar Singhania	39	4	5	3	8	3	0	5	28	No output for last part. Unsafe rotate functions. Makechild not implemented nor called from main.
9	15ME32007	Tarique Anwar	59	5	5	3	7	4	4	5	33	Seg Fault in last part of Case 2. Global variable counter used in findnbr. Makechild: Why use z? In the case flag == 0, y is not made a child of x. main() does some work of findnbr.
10	15ME33046	Himanshu Raj Khandelwal	57	5	5	3	8	3	2	5	31	Output: Child info of x not printed. Unsafe rotate functions. Makechild: Practically nothing done. The function child() does not always return a pointer. Some work of findnbr done in main.
11	16CE10027	Laxman Singh Rawat	1	4	5	3	5	3	0	5	25	No output from makechild (not implemented or called from main). Very inefficient inorder in findnbr. Also key should be allowed to be 0. Unsafe rotate functions.
12	16EE10010	Astikey Singh	65	1	3	3	8	4	0	5	24	Horrible looking output. Even preorder output incorrect. Eventually Seg Fault. Inverted condition in make_bst. Makechild not implemented (nor called from main).
13	16GG20023	Rishabh Kumar	93	2	5	3	8	2	0	3	23	All outputs are faulty (even BST not correctly generated). Rotate functions seem to do rotation at parent. Makechild not implemented. Bad indentation.

14	16GG20026	Shivam Gupta	91	4	5	3	8	2	0	4	26	Makechild output missing. Insert: Why allocate memory to lchild and rchild? Rotate functions seem to do rotation at parent. Makechild not implemented. Indentation should be improved.
15	16IM30008	Himanshu Rajoria	63	5	5	3	8	4	4	5	34	No output in Case 2 (seg fault). Makechild faulty, why written in main?
16	16IM30023	Kshitij Kumar Singh	61	4	5	3	8	3	1	5	29	No output of makechild. Unsafe rotate functions. Makechild implementation just started (only a helping function written). Why main computes task of findnbr?
17	16MA20007	Akash Mandal	79	6	5	3	8	3	8	5	38	T uninitialized in main (gives Seg Fault, repaired). Rotate functions unsafe.
18	16ME10058	Siddanati Sri Sai Uday Bhaskar	55	2	5	3	8	4	2	5	29	Seg Fault after printing preorder. Makechild has serious bugs: x is searched, but not y. Here, y can be a descendent of x or the converse. Findnbr not called by main.
19	16MF10023	Sangam	11	2	5	3	4	3	0	5	22	Output: Only preorder correct, findnbr output wrong, no makechild output. Findnbr: algorithm incorrect (should not compare with difference of keys of parent and child). Rotation functions unsafe. Makechild not implemented nor called.
20	17AE10005	Annanya	9	0	5	3	4	4	2	5	23	No output (compilation error and warnings). Findnbr: Why merge sort? Makechild: Very incomplete and not called from main.

21	17EC10005	Arya Goswami	99	0	2	3	2	4	0	3	14	No output (Seg Fault). All BST routines are incorrect. What are you doing with the array a[] in main and findnbr?
22	17EC10011	Daiveek Sai P	69	2	5	3	5	4	1	5	25	No output after preorder listing (Seg Fault). Inorderfill is very buggy, i is a "local" variable. Commented makechild is very faulty.
23	17EC10016	Ganni Koushik	85	4	5	3	8	4	2	4	30	No output of makechild. The right spelling of righth is right. Main does work of findnbr. Half-hearted implementation of makechild (also quadratic-time for calling parent1). Not called from main.
24	17EC10018	Gottipati Kavya Chowdary	71	4	4	3	8	4	0	5	28	No output of makechild. Insert may be improved (part within main function). Makechild not implemented or called.
25	17EC10026	Krishnam Kapoor	27	4	5	3	8	4	3	6	33	Output: Seg Fault before printing makechild results. Makechild: Only one case considered, but incorrectly.
26	17EC10032	Mohammad Sameer Suhail	81	3	5	3	5	3	2	5	26	Output: Initial printing OK, farthest neighbor ans gap faulty, no makechild outpput. Problem in modinorder: i is essentially a local variable, so this will not work. Unsafe rotation functions. Half-hearted beginning of the implementation of makechild.
27	17EC10036	Pallapothu Venkata Leela Pavan	83	4	5	3	8	3	7	6	36	Output: Seg Fault before printing makechild results. Unsafe rotate functions. Makechild conceptually fine (but must have minor bugs).

28	17EC10040	Poojitha Maheshappa	21	4	5	3	8	4	5	6	35	Output: Faulty after findnbr. Makechild conceptually Ok-ish but has bugs (What are you doing with the parent pointers? The rotate functions already handle parent links.).
29	17EC10041	Pranav Joshi	3	5	5	3	8	3	8	6	38	Output: Why is initial preorder printing missing? Unsafe rotate functions.
30	17EC10042	Pratap Kumar Mahato	13	2	5	3	6	3	4	6	29	Output: Everything faulty after initial preorder listing. i should be returned for findnbr to work. Unsafe rotate functions. Only one case in makechild considered.
31	17EC10043	Pravartya Kumar Dewangan	5	4	5	3	7	3	3	6	31	No output from makechild. Global variable (count) used in findnbr. Unsafe rotate functions. Very sketchy initial implementation of makechild.
32	17EC10049	Sai Gaurav Katam	95	6	5	3	8	3	8	6	39	Unsafe rotate functions. Perfect otherwise.
33	17EC10054	Shivam Saxena	23	4	4	3	8	4	6	6	35	Output: Seg Fault in makechild. Insert of first node should be inside the function (not in main). Makechild: Conceptually OK-ish. Count the number of rotations (do not use formula).
34	17EC10059	Tias Mondal	97	4	5	3	8	3	2	3	28	Output: Seg Fault in makechild. Unsafe rotate functions. Makechild code: Very little done. No effort on indentation (penalty -3).

35	17EC10060	Vandit Sharma	75	4	5	3	8	2	4	6	32	Output: Seg Fault in makechild. Unsafe rotate functions. Parent pointers should be handled in rotate functions. Makechild: Only one case implemented (that too has bugs).
36	17EC10062	Wayal Rushikesh	89	5	5	3	7	3	8	6	37	Faulty output after makechild. Main does work meant for findnbr. Unsafe rotation functions. Makechild conceptually OK.
37	17EC10065	Aadi Swadipto Mondal	19	5	5	3	8	3	8	6	38	Output: Seg Fault in Case 2 of makechild. Unsafe rotate functions. Makechild conceptually OK.
38	17EC10066	Amrit Sahu	77	6	5	3	8	3	8	6	39	Unsafe rotate functions. Perfect otherwise. Makechild comments: Use ancestor and descendent. Here, x is always the immediate predecessor of y, and y the immediate successor of x.
39	17EC10067	Arka Mitra	29	5	5	3	6	4	8	6	37	Preorder printing in Case 2 of makechild is faulty. Quadratic-time inorder function in findnbr (because of the search for -20). Makechild conceptually fine.
40	17EC30001	Adil Padiyal	69	1	3	3	0	3	0	4	14	Very faulty output (from the beginning). Search returns only 1 and -1, insert is not standard. Main inserts temp, not a key. Findnbr and makechild not implemented.
41	17EC30004	Ambuj Sahu	7	0	5	3	1	4	3	5	21	No output (Seg Fault at beginning). Main: init not called before insert, R uninitialized. Findnbr: very little done. Makechild: Only one case handled, but that too is buggy.

42	17EC30016	Gautam Jha	55	6	5	3	8	4	8	6	40	Perfect
43	17EC30022	Meduri Himanshu	11	4	5	3	8	3	8	6	37	Blank output from makechild. Unsafe rotate functions. Code for makechild: conceptually OK.
44	17EC30027	Pratik Pyarelal Bhagwat	13	0	5	3	6	3	0	6	23	Compilation fails. In makesol, use *m. Unsafe rotate functions. Makechild not implemented.
45	17EC30029	Sanku Yogesh	33	4	5	3	8	3	5	6	34	No output from makechild (implementation OK-ish). Unsafe rotate functions.
46	17EC30034	Sk Izajur Rahaman	19	4	5	3	7	3	1	6	29	No output from makechild. Global variable (count) used in inorder. Unsafe rotate functions. Makechild code: Practically nothing done.
47	17EC30043	Pankaj Mishra	73	4	5	3	8	3	0	6	29	No output from makechild. Unsafe rotation functions. Makechild not implemented.
48	17EE10002	Abhay Sengar	71	0	5	3	6	3	1	6	24	No output (Seg Fault at beginning). Inorder: i is a local variable. Unsafe rotate functions. Makechild: practically nothing done.

49	17EE10033	Pratimesh Singh	65	4	5	3	7	4	4	6	33	Output: Seg Fault in makechild. Inorder uses global variable ind. Makechild: only one case considered.
50	17EE10055	Vishal Raj	47	0	5	3	6	3	6	6	29	Compilation fails (problem in findnbr). Unsafe rotation functions. Makechild code: OK-ish, but with several conceptual problems (conditions are incorrect, for example). Main does some work of findnbr.
51	17EE10056	Shalini Mukhopadhyay	35	2	4	3	6	3	3	6	27	Only initial preorder output correct (seg fault in makechild). First node creation should be in insert (not in main). In inorder, i is not used correctly. Unsafe rotate functions. Implementation of makechild: Buggy and incomplete.
52	17EE30002	Anirudh Roy	3	5	5	3	8	3	4	6	34	Seg Fault in Case 1 output. Unsafe rotate functions. Makechild: Buggy (all cases not considered).
53	17EE30024	Anirban Majumder	49	6	5	3	8	4	8	6	40	Perfect.
54	17IE10006	Aniruddha Kirtania	45	4	5	3	8	3	4	6	33	No output from makechild. Unsafe rotation functions. Makechild: all cases not considered.
55	17IE10016	Duggirala Karthikeya	29	4	5	2	5	3	0	6	25	No output from makechild. Dummy node printed by preorder. Unsafe rotate functions. Rightskew used for finding farthest neighbors. This operation is not recommended.

56	17IE10018	Jayesh Sharma	9	4	5	3	8	3	2	6	31	No output from makechild. Unsafe rotation functions. Makechild: Buggy implementation. Moreover, calling search2 inside while loop makes it quadratic time.
57	17IE10024	Podipireddi Medha Kaushika	31	3	4	3	6	3	0	6	25	Output: findnbr wrong, makechild absent. Why is first key inserted in main? Findnbr has problem with p (basically a local variable). Unsafe rotation functions. Makechild not implemented.
58	17IE10034	Tushar Singla	39	4	5	3	8	3	4	6	33	Output of makechild: Wrong (Case 1) or Seg Fault (Case 2). Count does not have desired effect in preorder. Unsafe rotate functions. Makechild: Only one case implemented.
59	17IE10036	Kavish Gupta	51	6	5	3	7	3	8	6	38	Some work of findnbr done in main. Unsafe rotate functions. Makechild OK, but duplicating the code could have been avoided.
60	17IE10037	Sujabrata Mallick	41	0	5	3	5	4	0	5	22	No output (Seg Fault at beginning). Incorrect algo in inorder. Makechild not implemented. Why are T and T1 allocated memory in main?
61	17IE10039	Jaydeep Godbole	37	6	5	3	8	4	8	6	40	Perfect.
62	17IE10040	Tanmay Das	21	4	5	3	8	4	0	6	30	No output from makechild (not implemented). Otherwise OK.

63	17IE10041	Rounak Garg	23	5	5	3	7	4	6	6	36	Output for Case 2 hangs. Part of findnbr done in main. Makechild has problems (why is the condition that both $x \rightarrow \text{left}$ and $x \rightarrow \text{right}$ are NULL, for example).
64	17IM10015	Rohit Jajodia	53	4	5	3	6	3	1	6	28	No output from makechild. Quadratic-time findnbr. Unsafe rotation functions. Makechild code: Practically nothing done.
65	17MF10003	Akshat Suwalka	67	0	4	3	0	4	0	4	15	No output (Seg Fault at beginning). Problem in Search: no return value. Findnbr and makechild not implemented. Why is that -999 node created in main?
66	17QE30008	Mridul Agarwal	25	6	5	3	7	4	8	6	39	Part of findnbr done in main. Otherwise perfect.