Task 1

I gave if for evaluation

Task 2

Normal BFS algo.
Used a queue to keep track

Task 3

DFS Algo.
Used a stack to keep track

Task 4

Used DFS as cycle checker.
If found two nodes clashing.

Task 5

For this I used BFS as a modified
version.

Task 6

I used an algo like this.
When I find the first ~~dot~~ diamond
I look the sides to o find more
If I can find I take them.
Not sure about this algorithm.
But it is working.

Sorry for this explanation. I did not
have enough time to write fairly