- 1. I used javascript as my primary language and php for getting contents from a url
- 2. GetInfo.php returns the contents from a url
- 3. Under the "Crawler" class, we have **Crawler.Eval.evaluate** function which parses the pattern
- 4. Implementation example:-
  - 33458
  - ["29160", "48111", "84161"]
  - 29160
  - ["3382639", "1522687", "8019169"]
  - HiT the DEADEND:- twice
  - 8019169
  - in the above example, the starting integer is 33458 and the integers converted from the pattern are 29160, 48111, 84161
  - then the 1st integer is accessed and its has 3 patterns which yields again 3 numbers: 3382639, 15226867, 8019169
  - Now when 3382639 is accessed, it hits a deadend and then it checks for 1522687 which again hits deadend, then 8019169 is accessed
  - At this point:-

```
i. listOfNodes =
    {
        "33458":["29160","48111","84161"],
        "29160":["3382639","1522687","8019169"]
    }
    ii. nodeMap = ["33458", "29160", "8019169"]
    iii. visitedNodes = ["33458", "29160", "3382639", "1522687", "8019169"]
```

- 5. When all nodes yield "DEADEND" situation:-
  - 81306
  - ["81764", "40958"]
  - 81764
  - ["304303"]
  - 304303
  - ["119789", "2013391", "1099020"]

- HiT the DEADEND:- thrice
- 40958
- ["86089", "74764"]
- In the above example, after a few iterations, all the integers under "304303" yield DEADEND, then it moves up and checks 40958 because every other integer has already been accessed
- 6. I added a throw statement when the count goes more than 300 and at that point the crawling stops. Also added console statements to go over the integer values accessed.