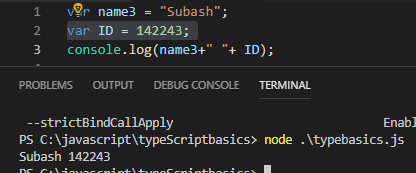
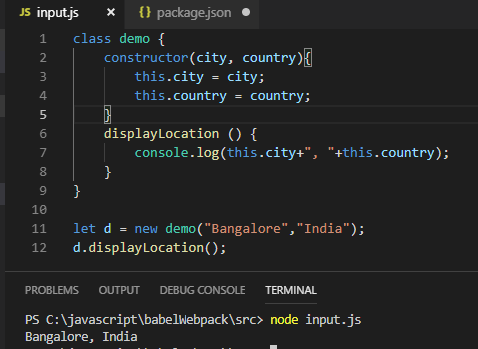
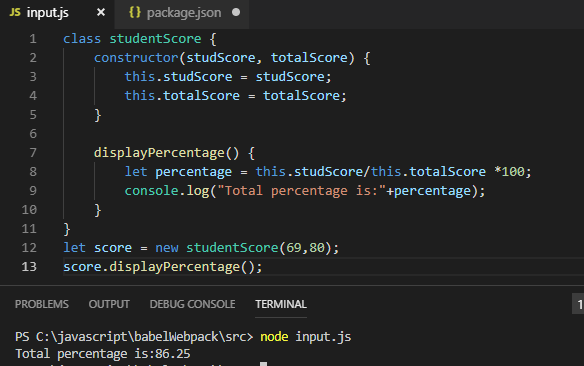
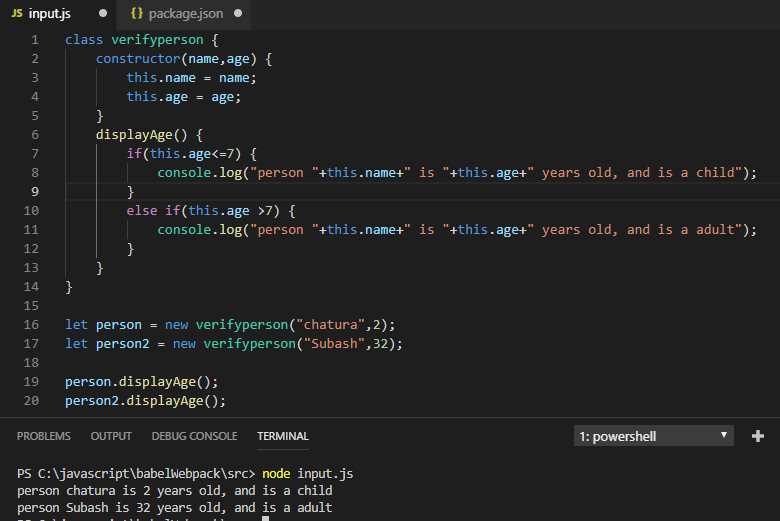
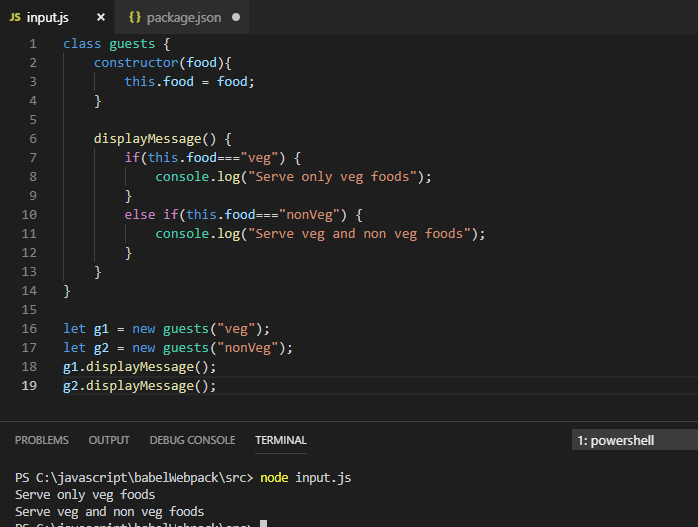
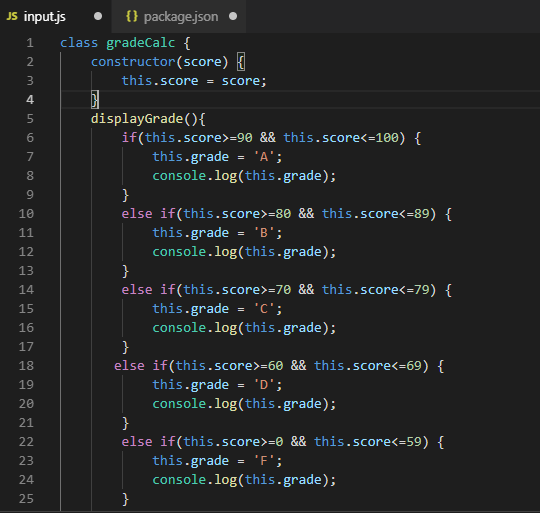
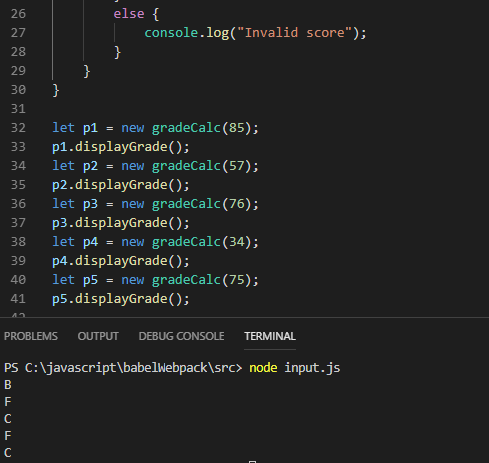
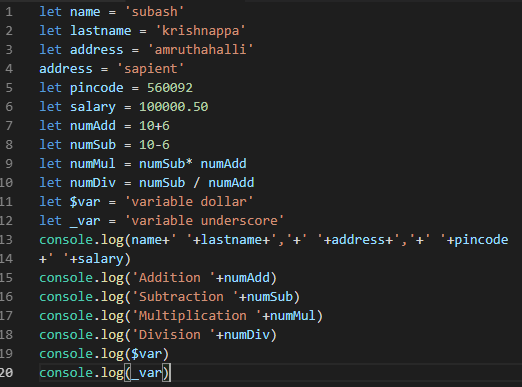
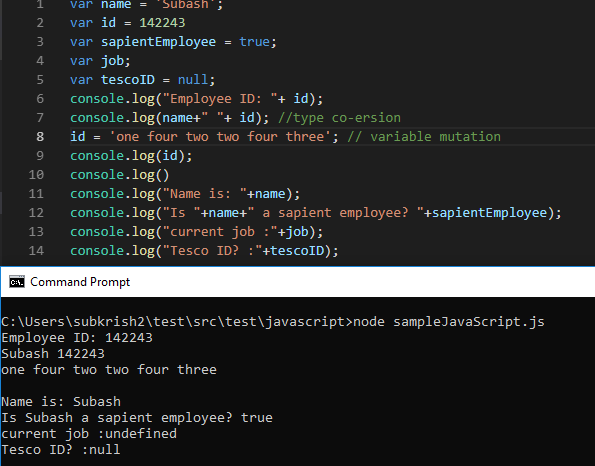
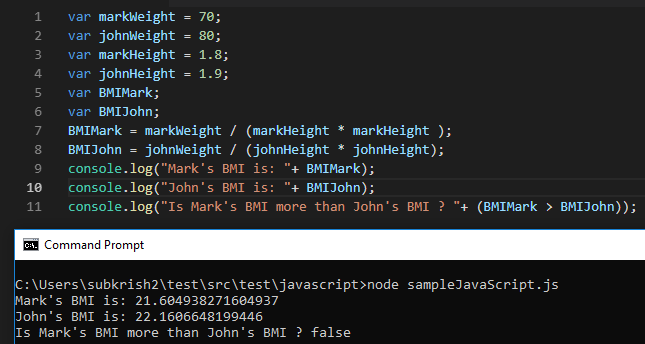
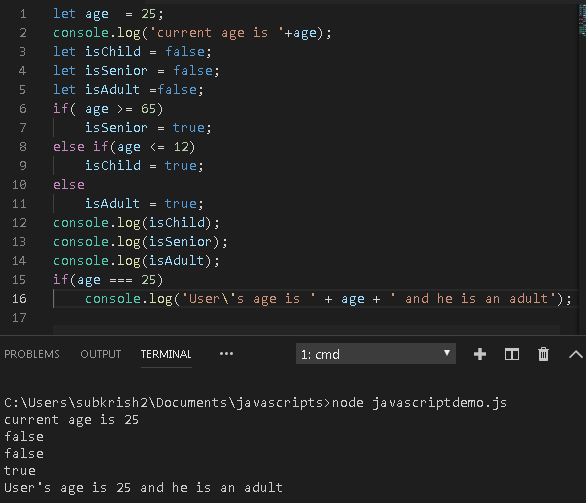
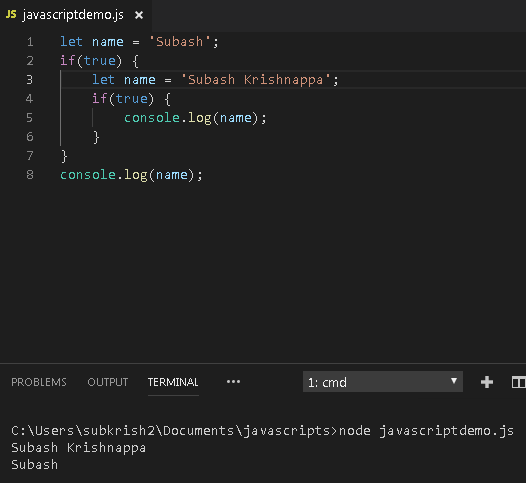
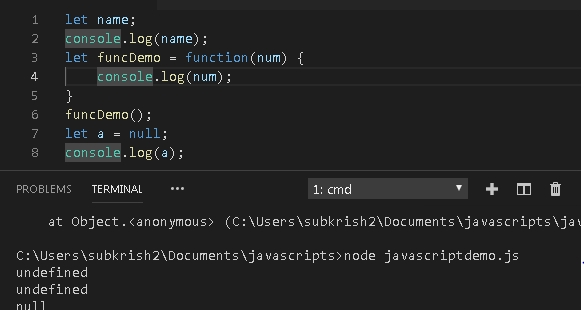
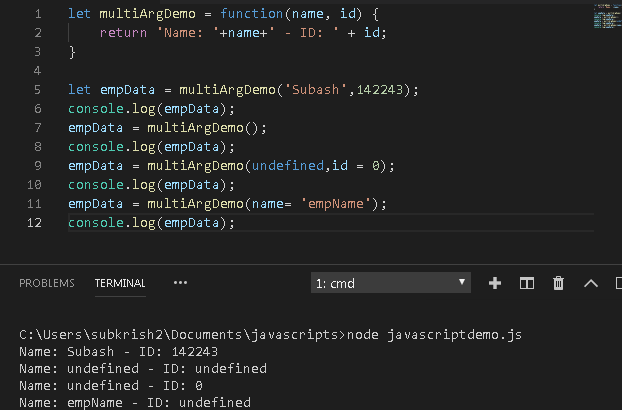
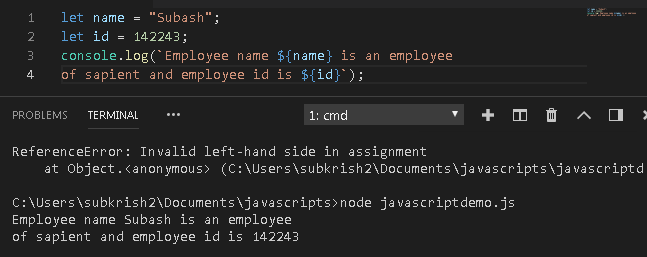
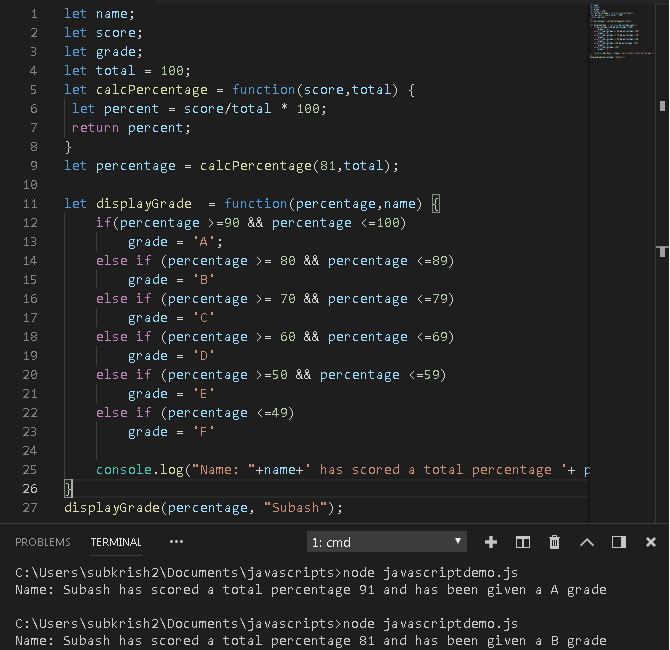
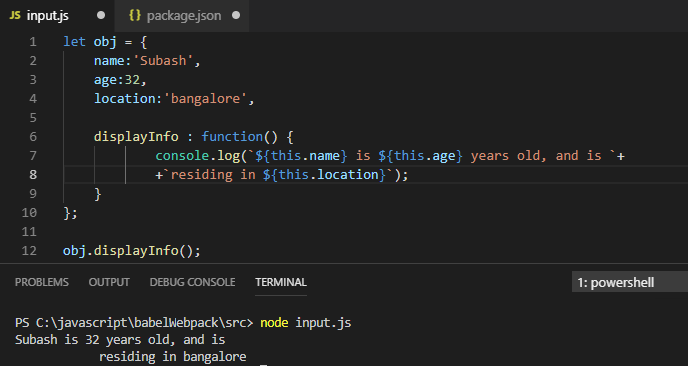
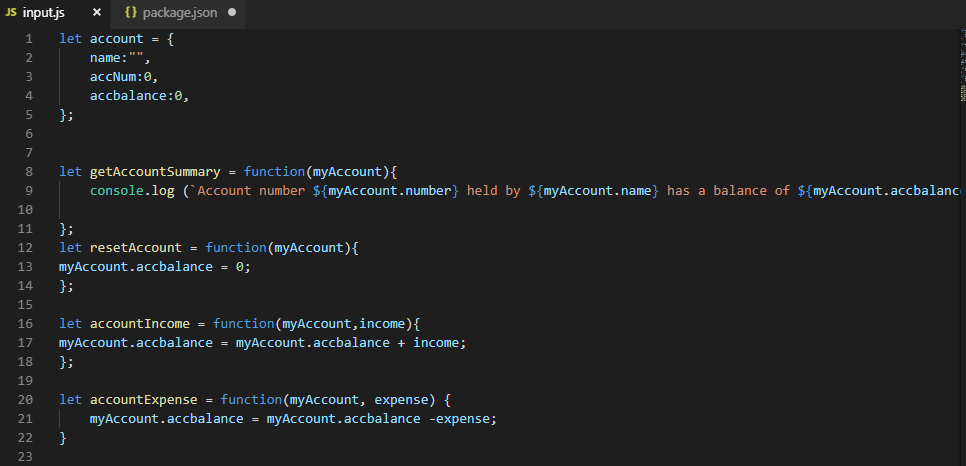
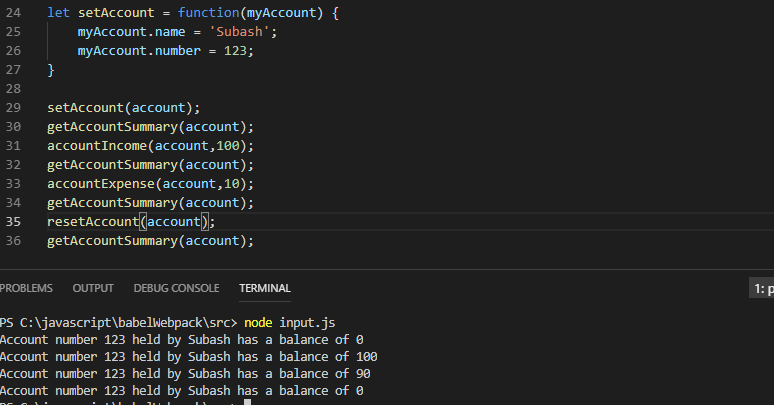
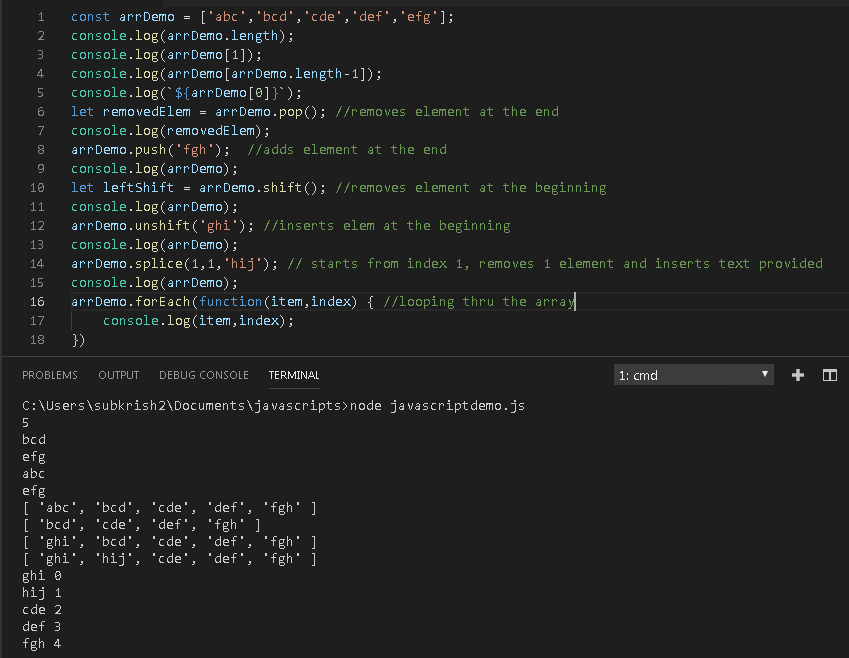
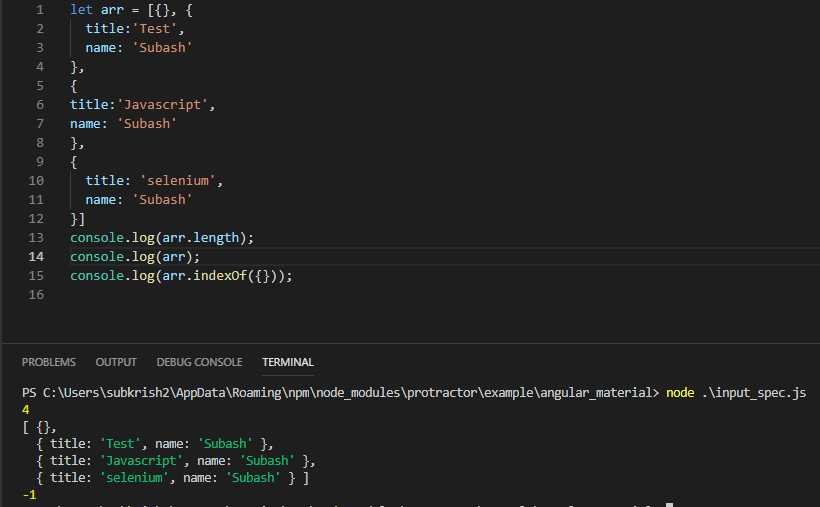
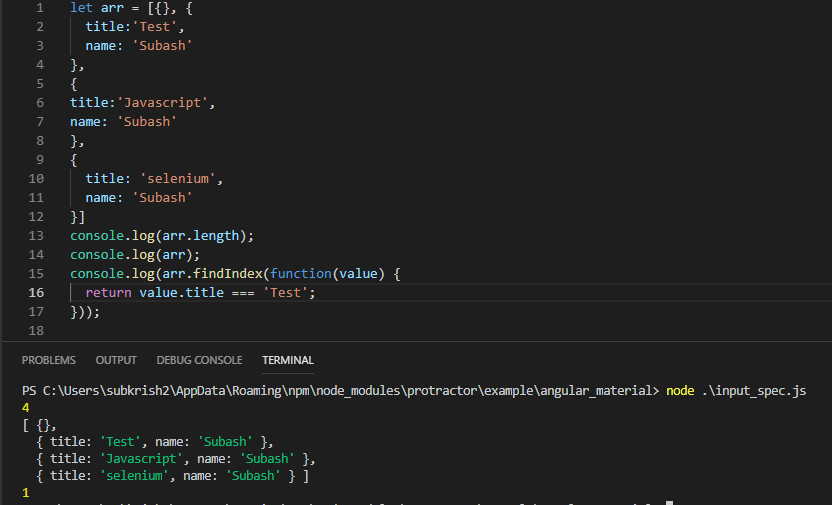
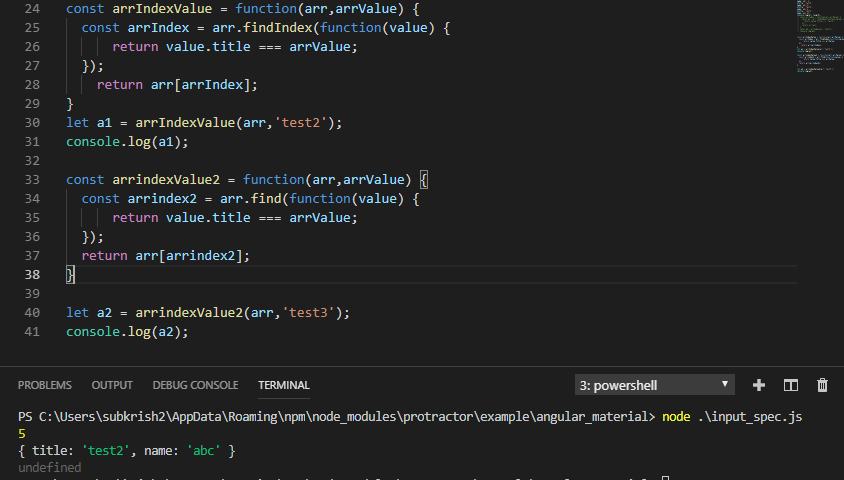
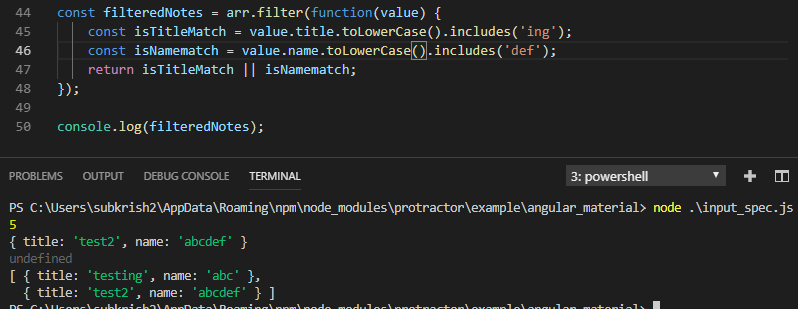
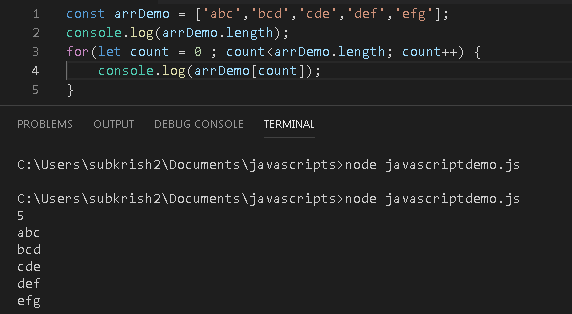
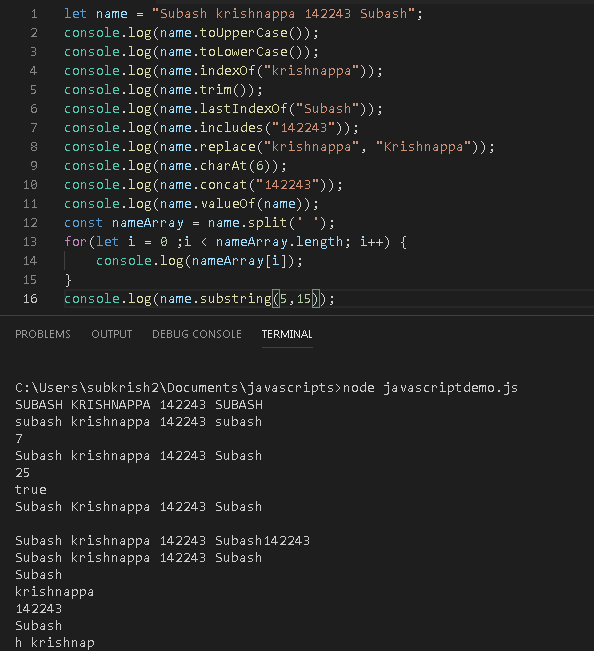
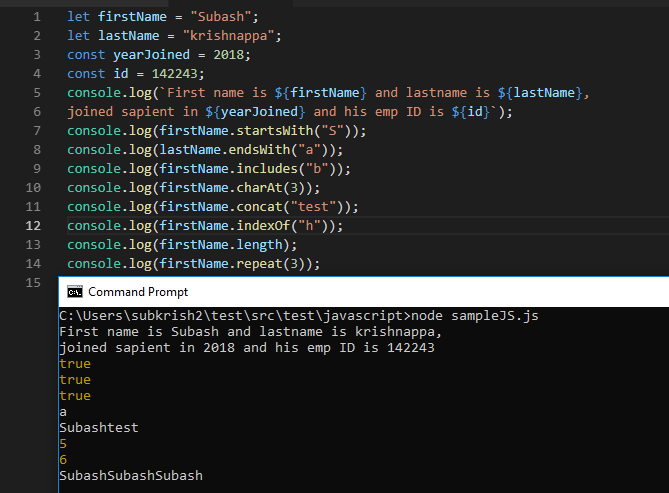
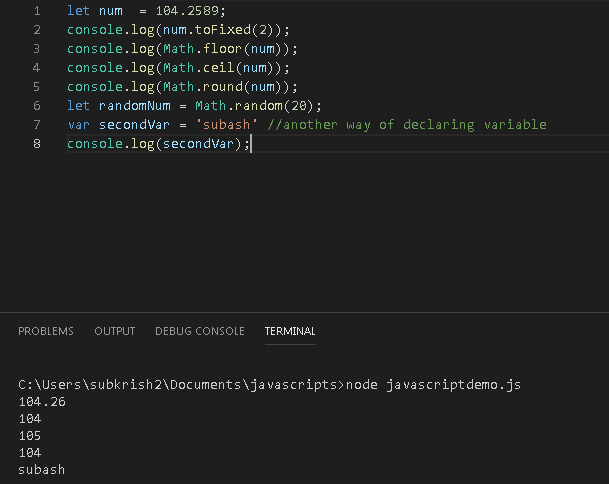
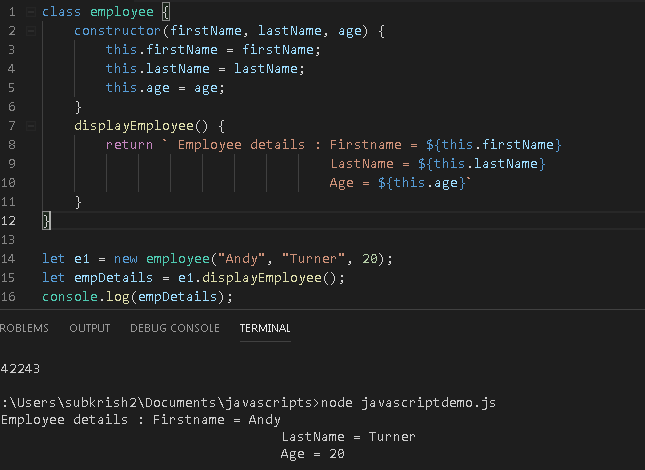
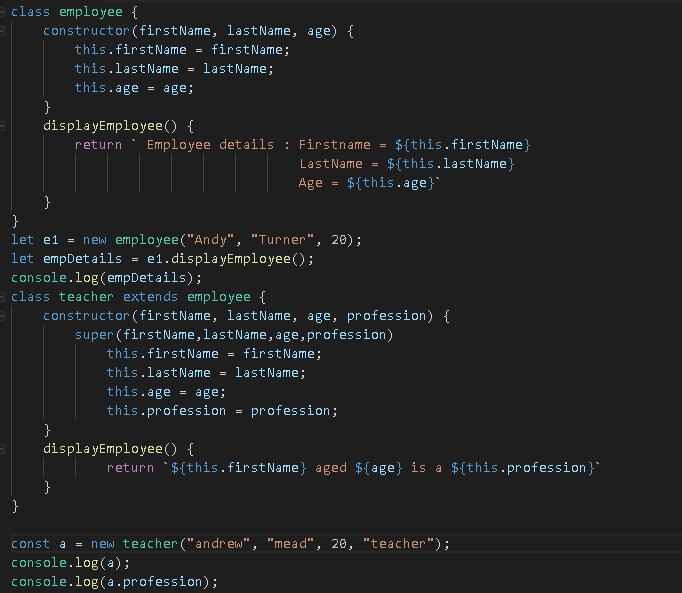
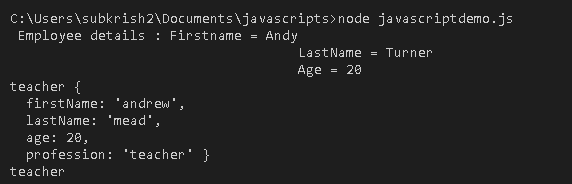
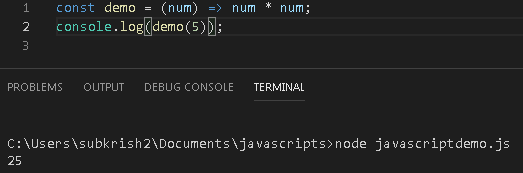
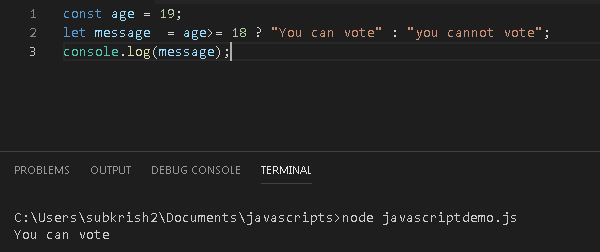
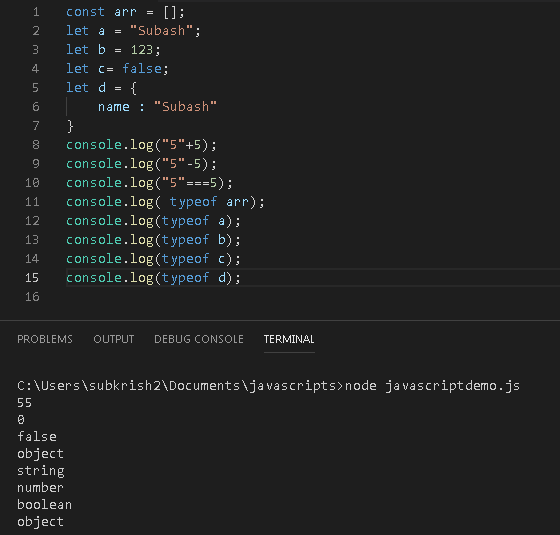
1. Java script is a lightweight, cross platform and object oriented programming language
2. Primitive Data types: Number, string, Boolean, undefined, null,
3. Javascript has dynamic typing -> data type is automatically assigned to variables, java script engine determines which data type a variable data type is at the run time
4. Converting ES6 to ES 5 is called as transpiling or polyfilling
5. Type Coercion:  
   
6. 
7. 
8. 
9. 
10. Grade Calculator:  
      
    
11. Execution Context:   
      
    Javascript has dynamic typing-> data types is assigned automatically:  
     
12. 
13. Compare BMI of two individuals:  
    
14. 

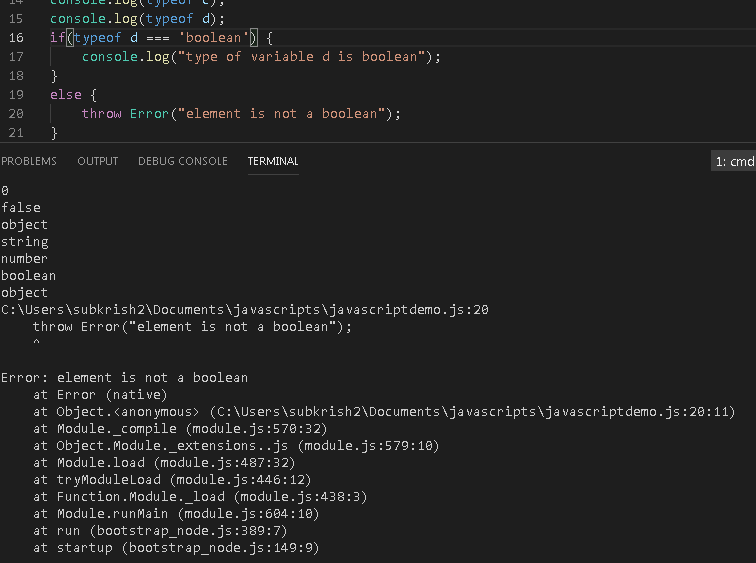


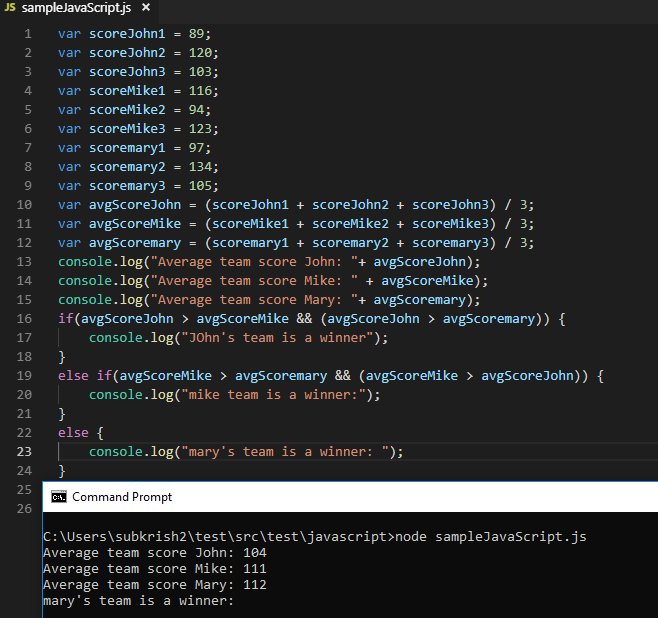
1. Variable shadowing:  
   
2. leaked global variable
3. Functions:
4. undefined and null:
5. Multi Arguments and default values:  
   
6. Template Strings:   
   
7. 
8. Java script Objects:  
   
9. Object Functions:   
   
10. 
11. Arrays:   
    
12. Array.indexOf  
    
13. Array.findindex():  
    
14. find:   
    
15. filter:  
    
16. for loop on an array:  
    
17. String methods  
      
    
18. var : declaring variable  
    
19. Object oriented programming:  
    Classes:  
    
20. subclasses  
      
    
21. arrowFunctions:  
    
22. Ternary operator:

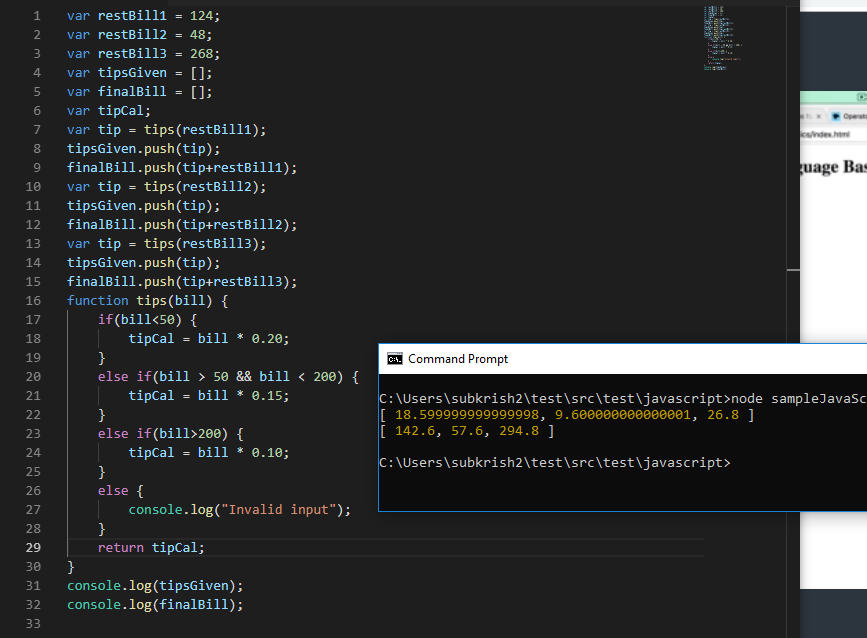
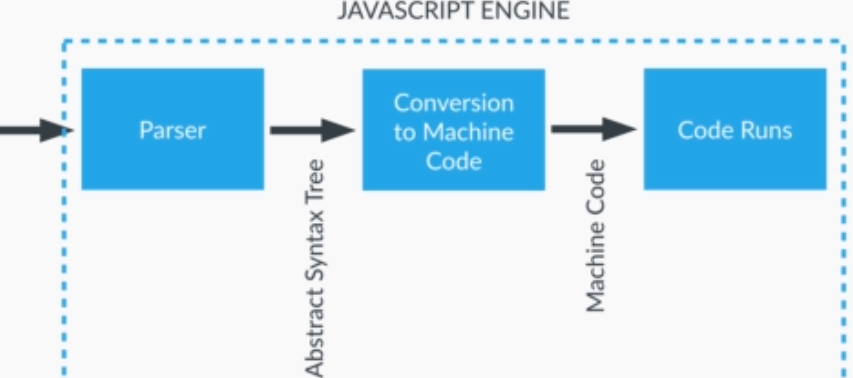


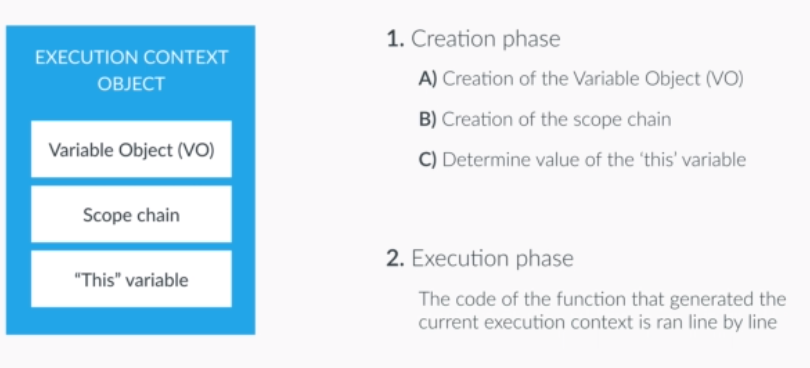
1. Truthy and Falsy  
   
2. Type Coersion:

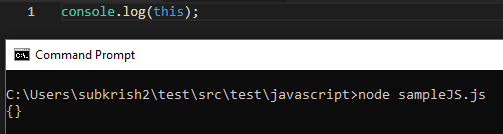
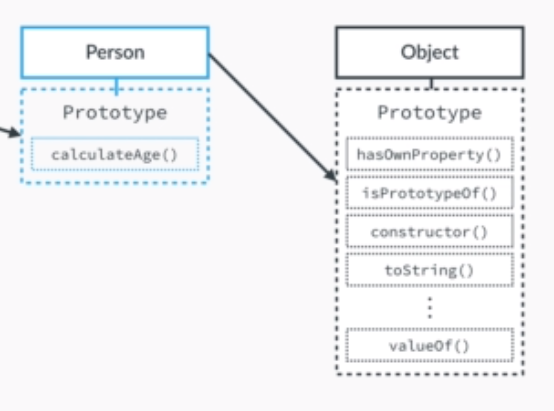
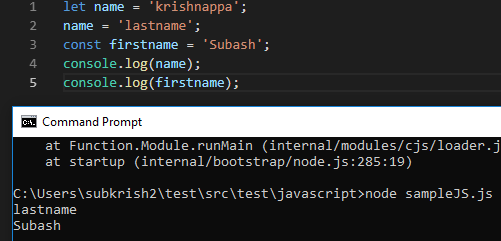
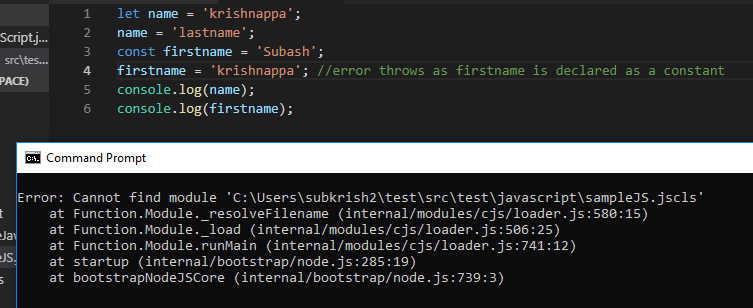


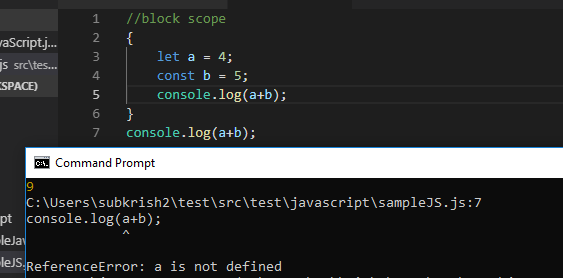
1. throw   
   

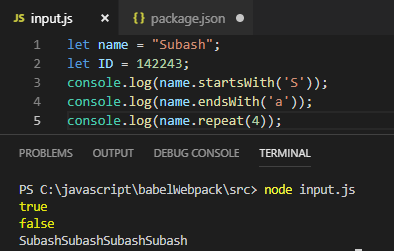
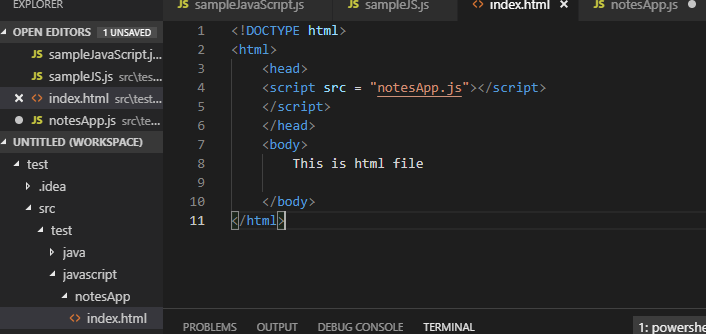
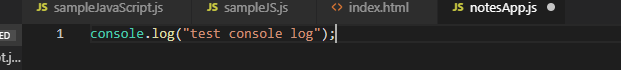
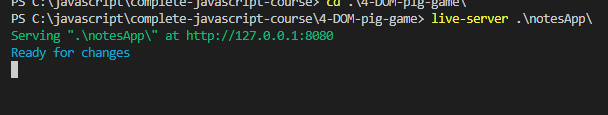


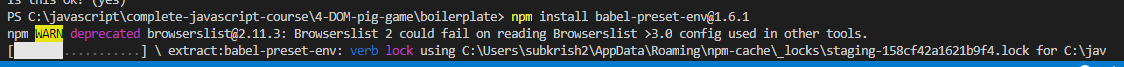
1. Tip Calculator:  
   
2. host where java script engine is written , java script engine takes our JS code and executes it,   
   
3. Global Execution Context
4. Execution Context -> methods()



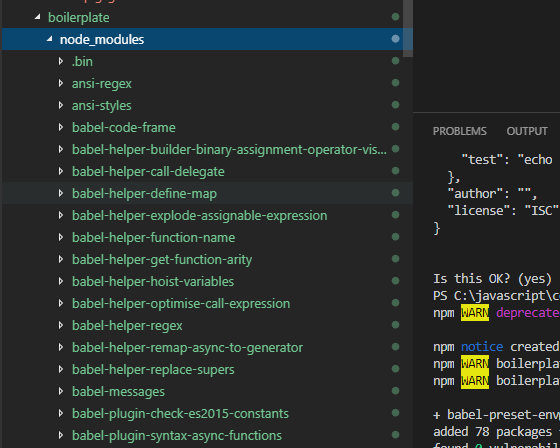
1. Functions and variables in js are hoisted -> they are made avaiable before execution actually starts Each new function creates new scopeLexical Scoping: If a function is created within another function
2. Global Scope is a default scope
3. This keyword:  
   
4. Primitives:  
   Numbers, boolean, string, undefined, null
5. Objects:
6. Objects, function, arrays
7. Every object that we create is an instance of an Object constructor has an inbuilt methods like as below  
   
8. Inheritance /prototype
9. Every javascript object has “Prototype Property”Closures:
10. call, bind and apply methods:
11. ES6 : let and const  
     

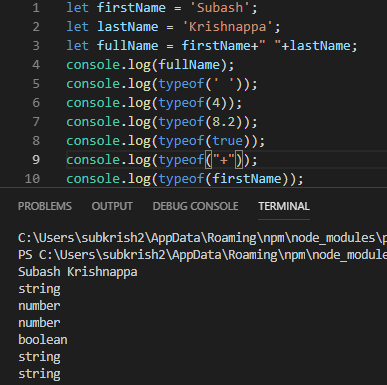
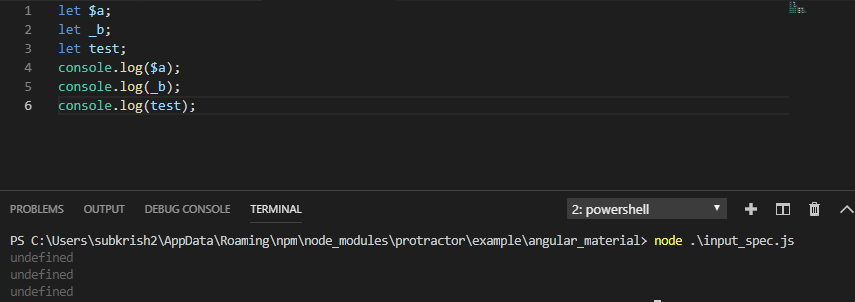
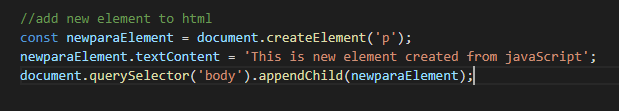
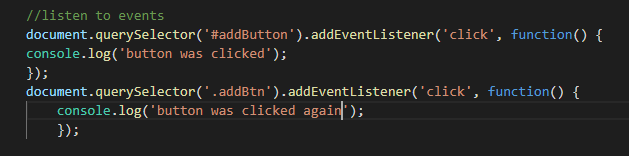
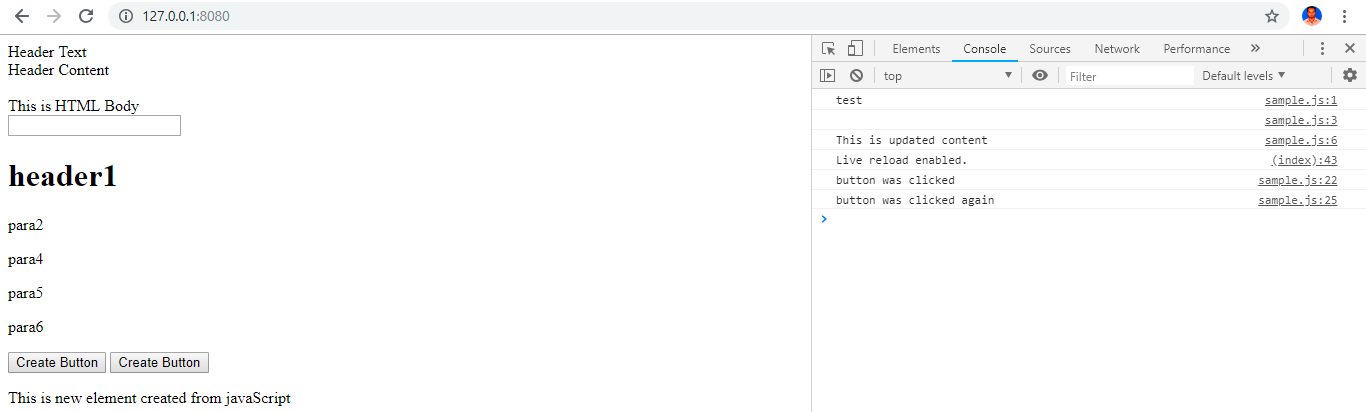
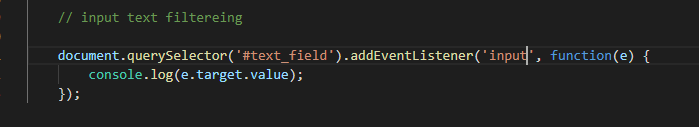
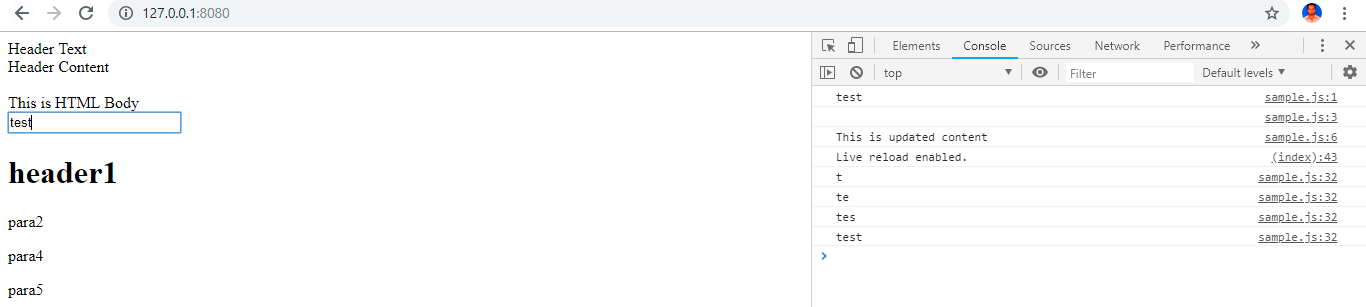
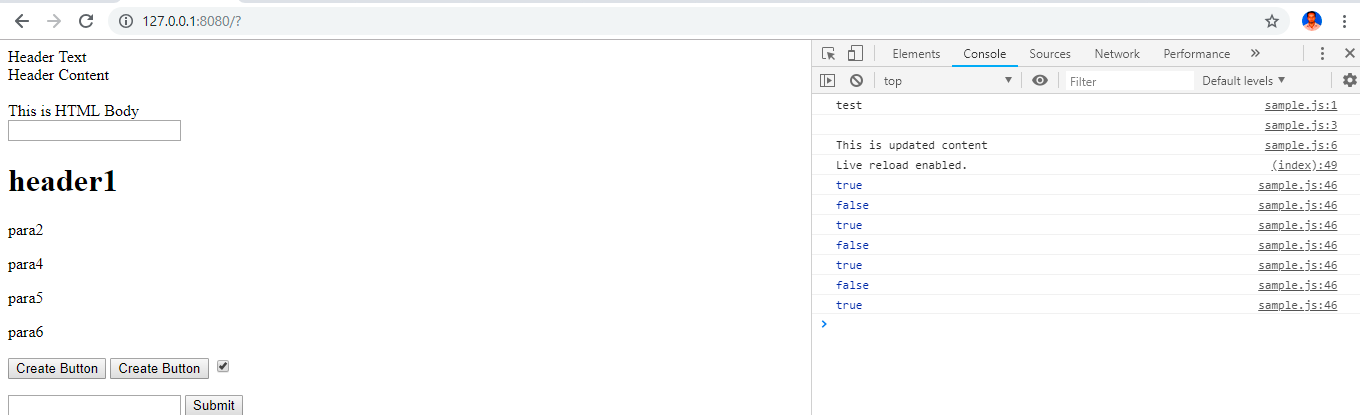
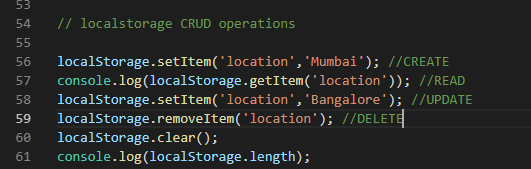
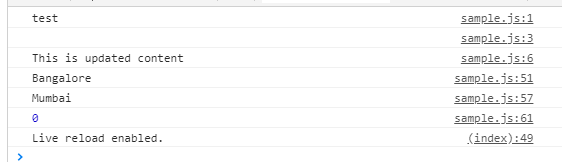
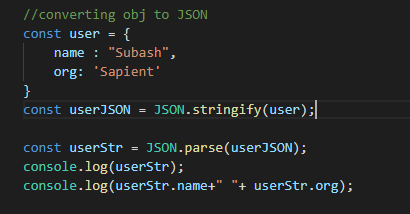
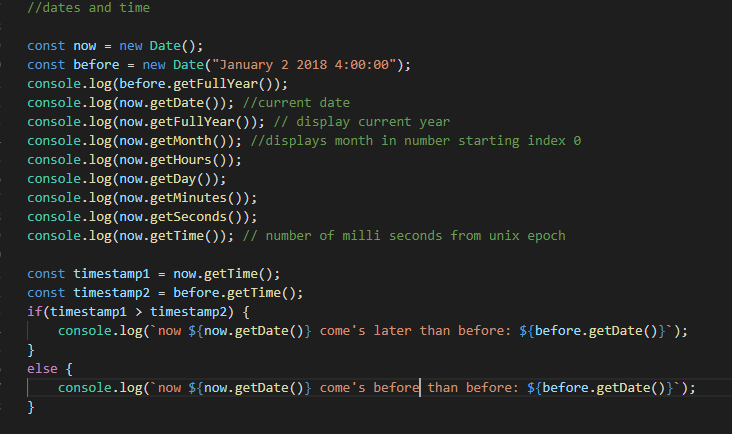
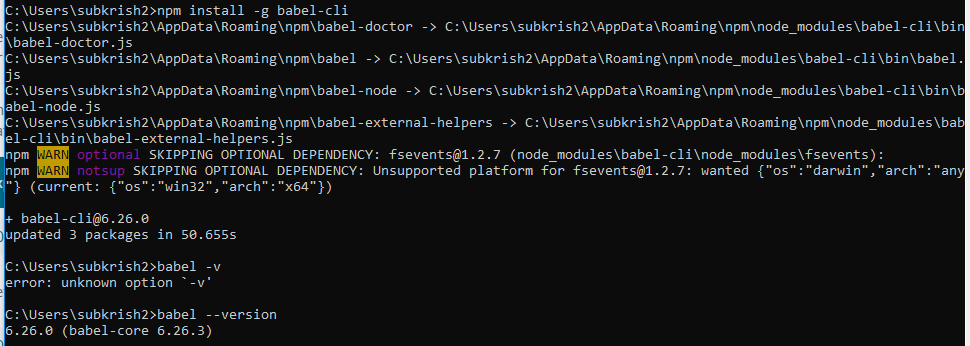
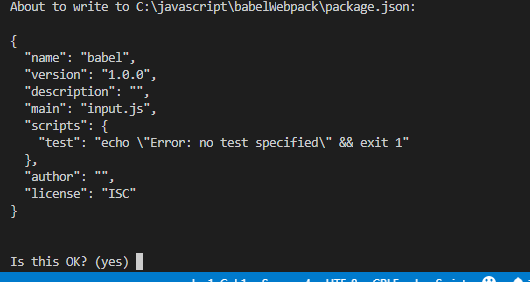
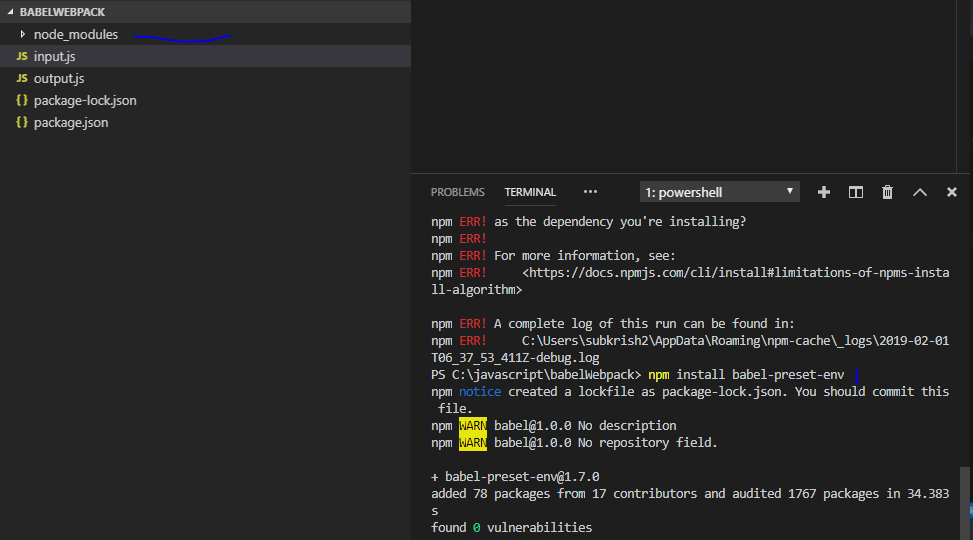
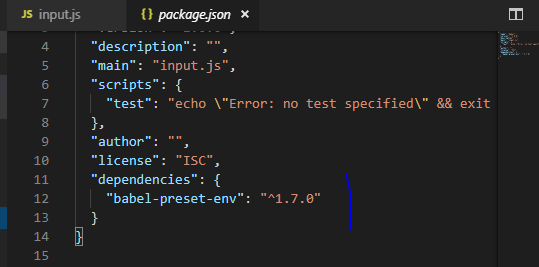
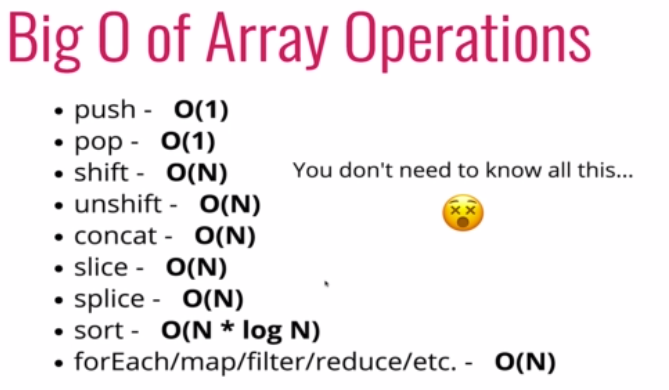
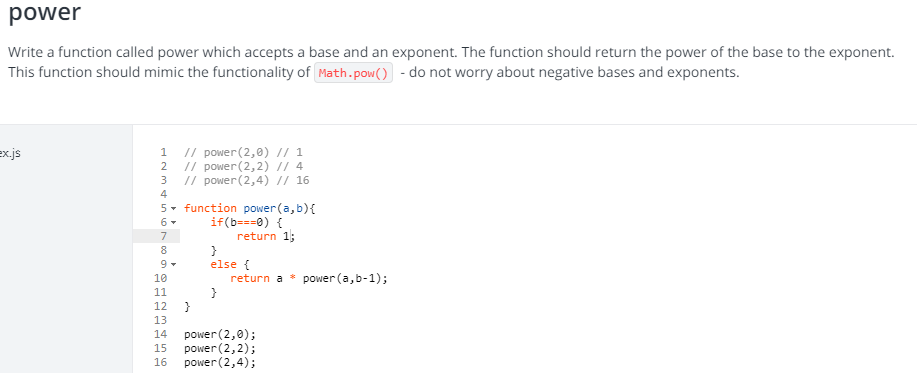
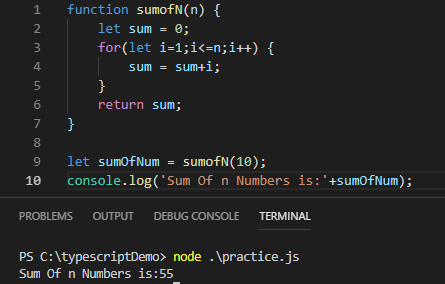
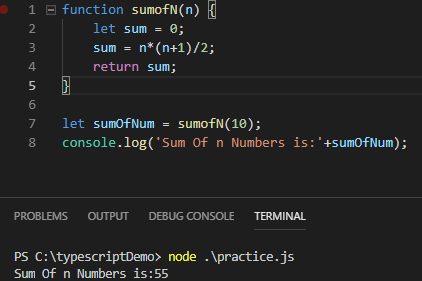
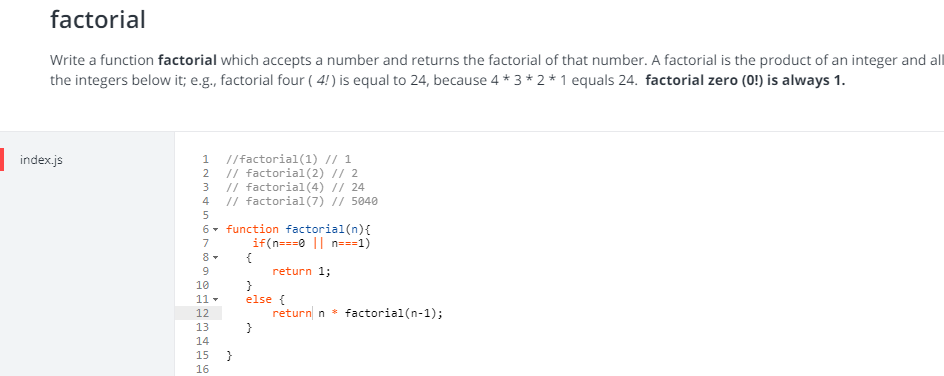
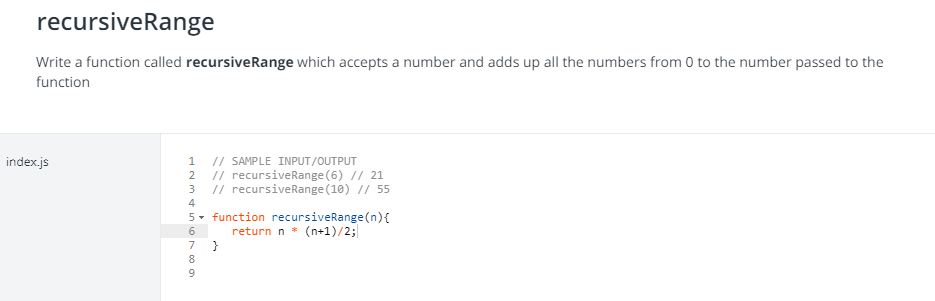
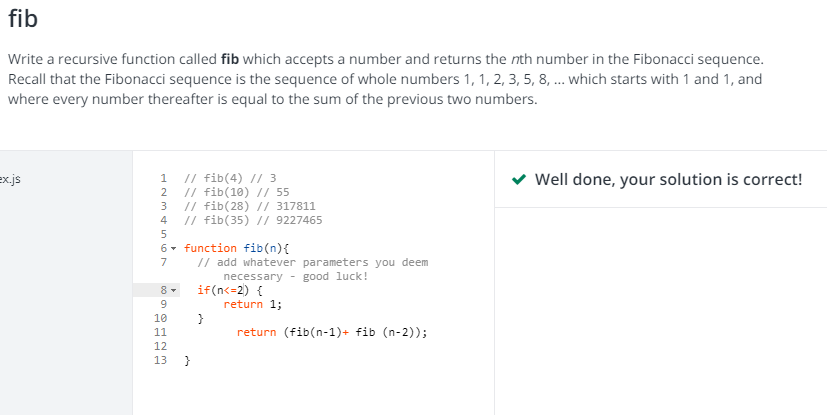
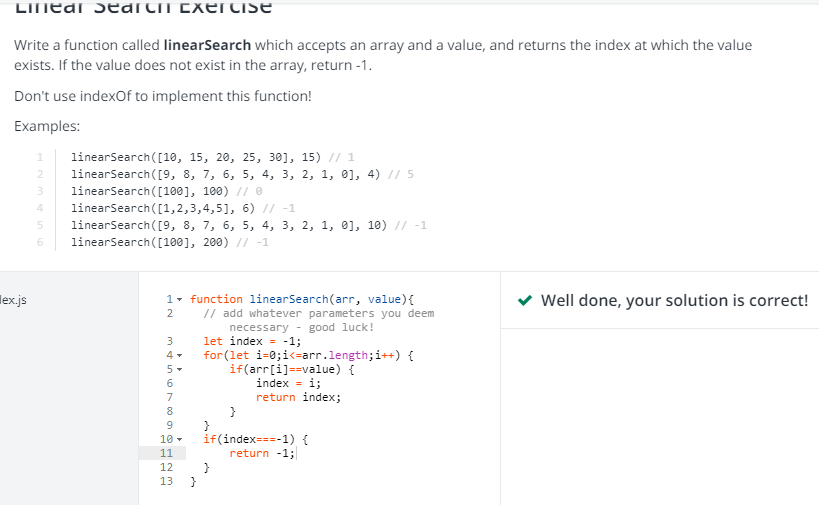
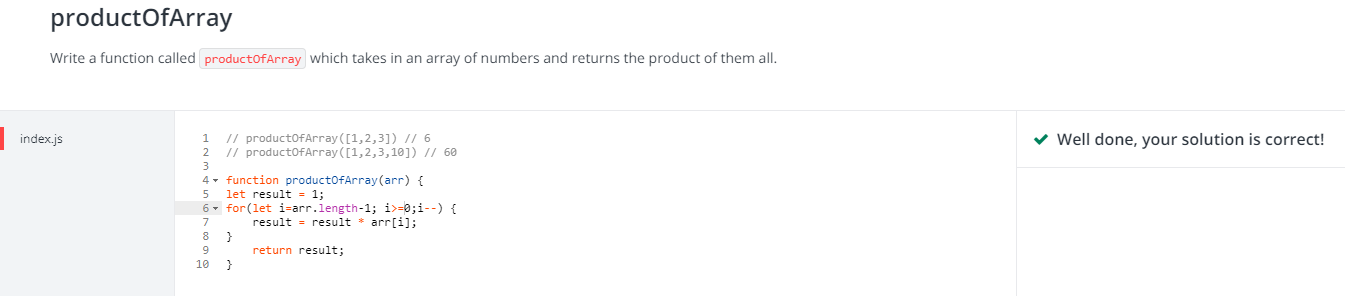


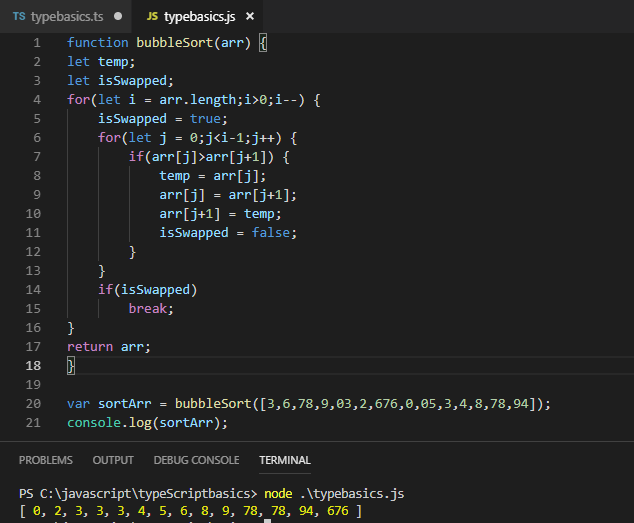
1. ES6 -> Strings  
   template literals  
   
2. Destructing:
3.   
   
4. Array Search
5. Function constructors: we can create objects using function constructors
6. Object.create
7. Babel and webpack: babel -> ensures app work in wider range of browsers, webpack -. Ensures can use new features
8. Live reloading to launch a website as a URL:  
   
9. To access another file  
   require(‘./newFile.js’);
10. Babel -> solves cross browser compability issues  
    babel installation:  
    
11. verify installed babel version:  
    

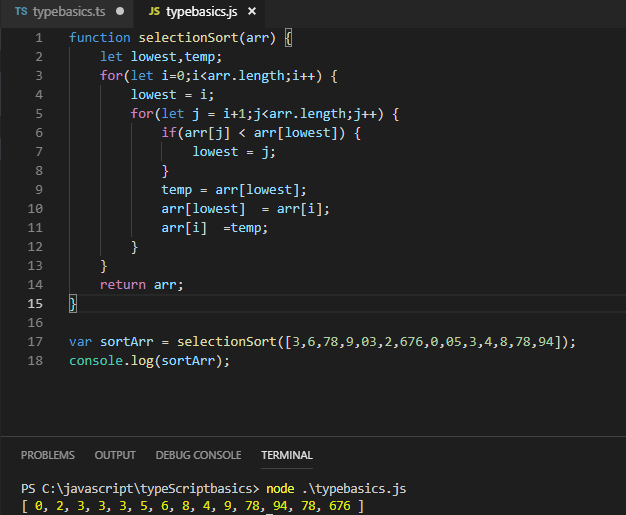
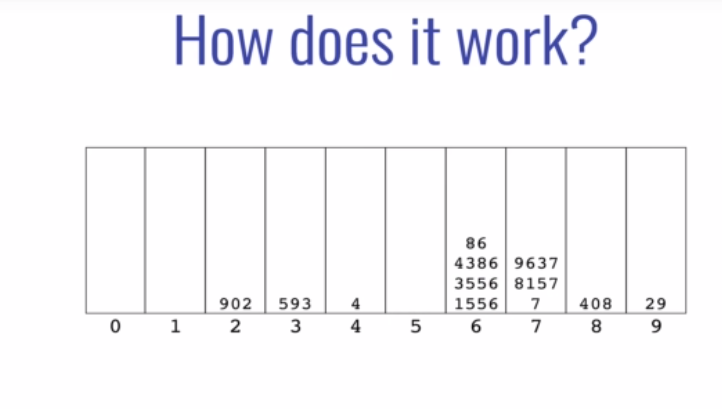
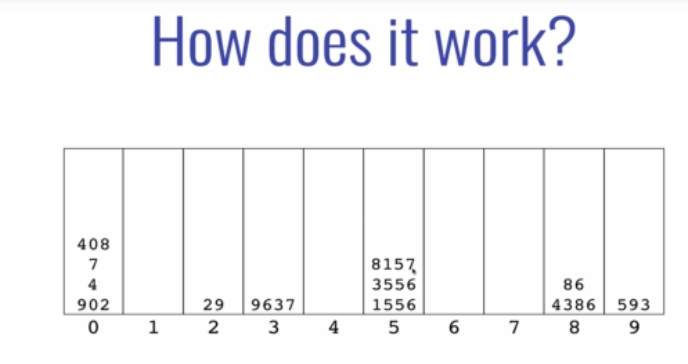


on executing this command, a list of all node modules are installed

Events: are notifications that are sent to notify that something has occurred

1. Event listener:
2. Node js -. Is a javascript runtime built on chrome’s v8 javascript engine
3. valid variable names:  
   
4. 
5.   
     
   
6.   
     
   
7.   
     
   
8. LocalStorage:  
     
   
9. 
10. Date’s javascript  
    
11. BABEL & WEBPACK:  
    babel installation:  
    
12. npm init creates package.json file
13. 
14.   
    On running npm install all dependencies mentioned under package.json file, will get installed automatically into the workspace
15. 
16. Power of a number  
    
17. Sum of all numbers from 1 to n:  
      
    Alternate solution:  
    
18. Factorial  
    
19. recursive Range  
    
20. Fibonacci Series  
    
21. Linear Search  
    
22. 
23. Binary Search -> Works only in sorted arrays
24. Bubble Sort:

Largest value bubbles to the top in every iteration, so in every iteration, number of elements to be sorted is reduced   
Big O for bubble sort is O(n2)

1. Selection Sort:  
   Similar to bubble sort but in selection sort we swap the minimum element at the beginning  
   
2. Radix Sort:  
     
     
   
3. Hash Tables:  
   Custom Hash Function: