

## orderBy FILTER IN ANGULARJS

- The **orderBy** filter is used to sort an array.
- By default, the **strings** are sorted in **alphabetically**.
- By default, the **numbers** are sorted in **numerically**.
- The **orderBy** filter also supports a **comparator** function based on the values computed using the [expression](#) to build.
- The minus symbol (-) is used to sort an array in descending order.

### Syntax for orderBy filter in AngularJS:

```
{{ orderBy_expression | orderBy : expression : reverse : comparator}}
```

### Parameter value for orderBy filter in AngularJS:

Value	Type	Description
<a href="#">expression</a>	array<(function()   string)>  string	<p>The expression is used to define the order of the element. The expression can be one of array, string and function.</p> <p><b>Array:</b> an array item can be both function and string. If you use an array when you need more than one object property to define the sorting order.</p> <p><b>String:</b> If the array is an array of object, you can sort the array by the value of one of the object properties. The optional prefix + or – is used to control the sorting direction as ascending or descending in expression. The default order is ascending order. If no property is provided, the collection items itself is used in comparison.</p>

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	function()	<b>Function:</b> It is allowed the user to create a custom function for sorting.
reverse	boolean	This field value is <b>optional</b> . This is also a <b>boolean</b> value. If true, reverse the sorting order.
comparator	function()	This field value is <b>optional</b> . It is allowed the user to create a <b>custom comparator</b> function for sorting. When you used a custom comparator function, you must pass a reverse argument value for sorting. If you set the reverse value as <b>false</b> , then it returns the default order i.e. the <b>ascending</b> order.



## Sample coding for orderBy filter in AngularJS:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Wikitechy AngularJS Tutorials</title>
  </head>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5.6/angular.min.js">
  </script>
  <body>
    <div ng-app="myApp" ng-controller="orderCtrl">
      <h1>Wikitechy orderBy filter in AngularJS</h1>
      <ul>
        <h3>Technology list in ascending order</h3>
        <li ng-repeat="x in technology | orderBy : 'tut' "> {{x.tut}}</li>
        <h3>Technology list in descending order</h3>
        <li ng-repeat="x in technology | orderBy : '-tut' "> {{x.tut}}</li>
      </ul>
    </div>
    <script>
      var app = angular.module('myApp', []);
      app.controller('orderCtrl', function($scope) {
        $scope.technology = [
          {"tut" : "HTML"},
          {"tut" : "AngularJS"},
          {"tut" : "CSS"},
          {"tut" : "C"},
          {"tut" : "JAVA"},
          {"tut" : "PHP"},
        ];
      });
    </script>
  </body>
</html>
```

### orderBy Filter in AngularJS:

- The orderBy filter is used to displays a technology array item in ascending and descending order.

```
<li ng-repeat="x in technology | orderBy : 'tut' "> {{x.tut}}</li>  
<li ng-repeat="x in technology | orderBy : '-tut' "> {{x.tut}}</li>
```

### Data:

- Collection of data has been defined using array for our AngularJS Application.

```
technology =[  
  {"tut" : "HTML"},  
  {"tut" : "AngularJS"},  
  {"tut" : "CSS"},  
  {"tut" : "C"},  
  {"tut" : "JAVA"},  
  {"tut" : "PHP"},  
];
```

### Logic:

- Controller logic for the AngularJS Application.

```
app.controller('orderCtrl', function($scope) {  
  $scope.technology =[  
    {"tut" : "HTML"},  
    {"tut" : "AngularJS"},  
    {"tut" : "CSS"},  
    {"tut" : "C"},  
    {"tut" : "JAVA"},  
    {"tut" : "PHP"},  
  ];  
});
```

**HTML:**

- Viewable HTML contents in AngularJS Application.

```
<div ng-app="myApp" ng-controller="orderCtrl">
  <h1>Wikitechy orderBy filter in AngularJS</h1>
  <ul>
    <h3>Technology list in ascending order</h3>
    <li ng-repeat="x in technology | orderBy : 'tut' "> {{x.tut}}</li>
    <h3>Technology list in descending order</h3>
    <li ng-repeat="x in technology | orderBy : '-tut' "> {{x.tut}}</li>
  </ul>
</div>
```



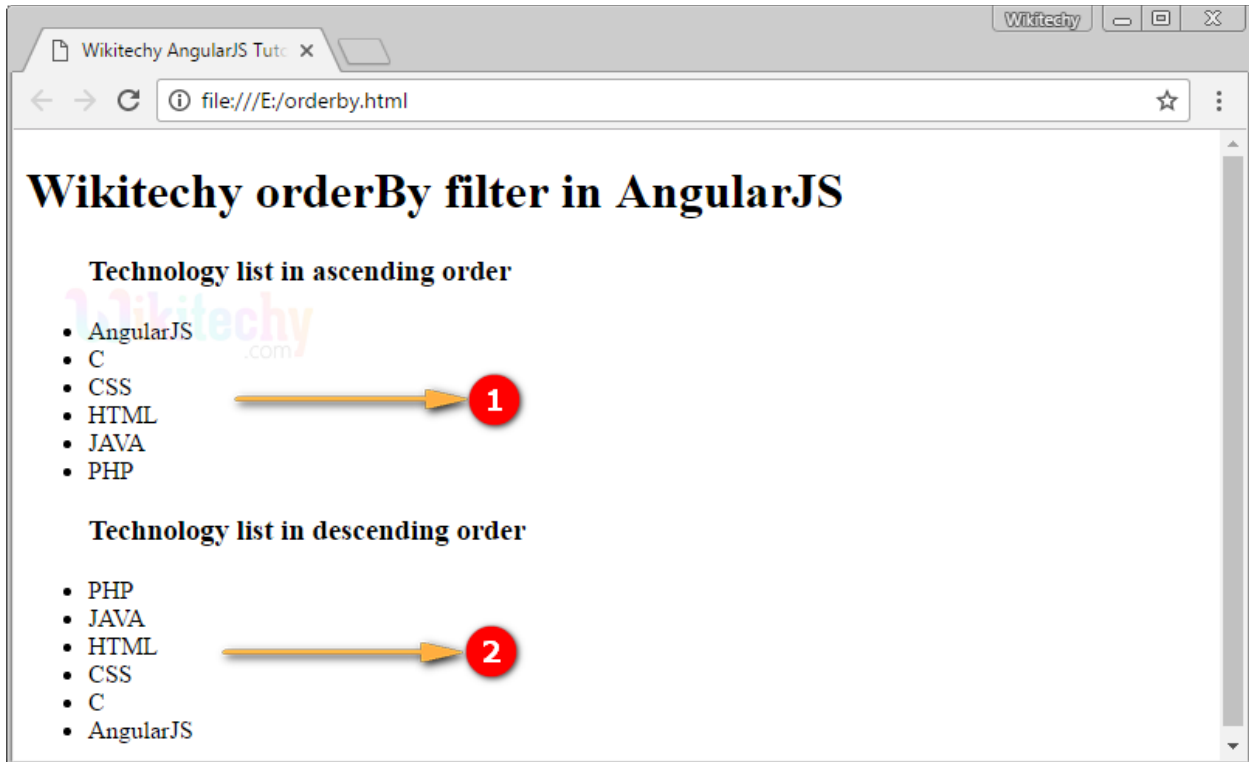
## Code Explanation for orderBy filter in AngularJS:

```
<!DOCTYPE html>
<html>
  <head>
    <title>Wikitechy AngularJS Tutorials</title>
  </head>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.4.8/angular.min.js">
  </script>
  <body>
    <div ng-app="myApp" ng-controller="orderCtrl">
      <h1>Wikitechy orderBy filter in AngularJS</h1>
      <ul>
        <h3>Technology list in ascending order</h3>
        <li ng-repeat="x in technology | orderBy : 'tut'">
          {{x.tut}}
        </li>
        <h3>Technology list in descending order</h3>
        <li ng-repeat="x in technology | orderBy : '-tut' ">
          {{x.tut}}
        </li>
      </ul>
    </div>
    <script>
      var app = angular.module('myApp', []);
      app.controller('orderCtrl', function($scope) {
        $scope.technology = [
          {"tut": "HTML"},
          {"tut": "AngularJS"},
          {"tut": "CSS"},
          {"tut": "C"},
          {"tut": "JAVA"},
          {"tut": "PHP"},
        ];
      });
    </script>
  </body>
</html>
```

1. AngularJS is distributed as a [JavaScript](#) file, and can be added to a HTML page with a `<script>` tag.
2. The AngularJS application is defined by `ng-app="myApp"`. The application runs inside the `<div>` tag. It's also used to define a `<div>` tag as a root element.
3. The `ng-controller="orderCtrl"` is an AngularJS directive. It is used to define a controller name as `"orderCtrl"`.
4. `<li ng-repeat="x in technology| orderBy: 'tut' ">` is used to display `technology` array element list in **ascending** order.
5. `{{ x.tut}}` is used to bind a `technology` array list in ascending order.
6. `<li ng-repeat="x in technology| orderBy: '- tut' ">` is used to order a `technology` array element list in **descending** order.
7. `{{ x.tut}}` is used to bind a `technology` array list in descending order.
8. Here we create a module by using [angular.module](#) function.
9. Here we have declared a controller `orderCtrl` module using `apps.controller()` function. The value of the controller modules is stored in scope object. In AngularJS, `$scope` is passed as first argument to `apps.controller` during its constructor definition.
10. Here we have set the value of `$scope.technology` array as  

```
[{"tut":"HTML"}, {"tut" :"AngularJS"}, {"tut" :"CSS"}, {"tut" :"C"}, {"tut" : "JAVA"}, {"tut" :"PHP"}, ];
```

## Sample Output for orderBy filter in AngularJS:



1. Display an array technology element in ascending order.
2. Display an array technology element in descending order.