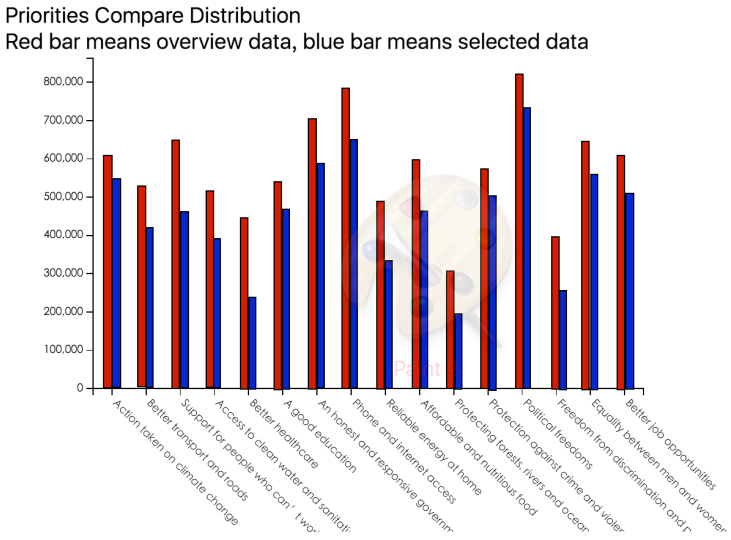
HW4 Analysis Design

1. Task 4a

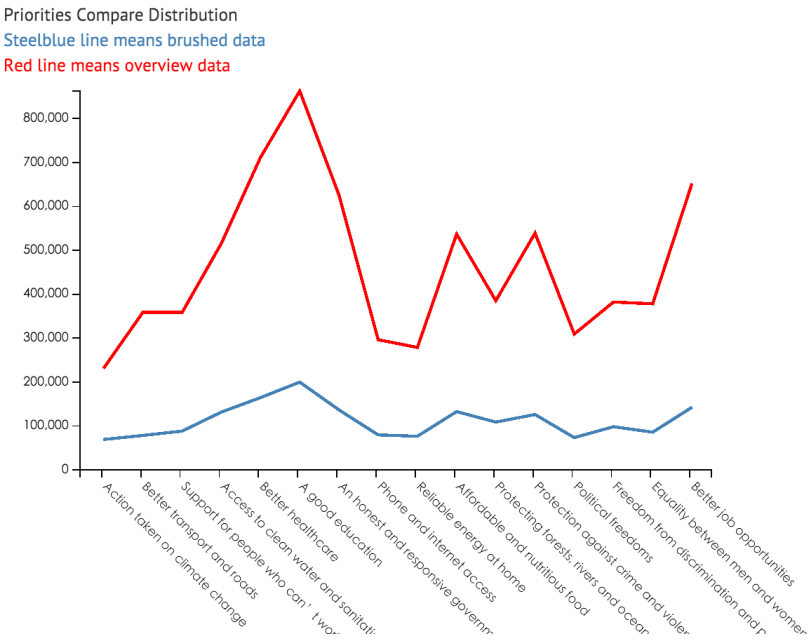
To solve the comparative issue of priority chart, there are two solutions.

1) Use comparative bar chart



The overview data are represented by the red rectangles while the selected data are represented by the blue rectangles. In this way, we can compare the overview data and the data selected by the brush by the height of the rectangles.

2) Use line chart



The red line represents the overview data while the blue line represents the selected data. In this way, we can compare the overview data and the data selected by the brush by the height of the lines.

2. **Task 4c**

The screenshot of the source code:

```
102
103         // Store the original display data
104         self.origData = [];
105         self.displayData.forEach(function(d, i){
106             self.origData[i] = self.displayData[i];
107         });
108
```

```
169
170         //Line Chart
171         //Brushed data
172
173         var line = d3.svg.line()
174          .x(function(d,i) {
175              return self.xScale(i) + self.graphW/32; })
176          .y(function(d,i) {
177              return self.yScale(d); })
178          .interpolate("linear");
179
180         var path = self.visG.selectAll(".path").data(self.displayData);
181         path.exit().remove();
182         path.enter()
183         .append("path")
184         .attr({
185             "class": "path"
186         })
187         .style({
188             "stroke": "steelblue",
189             "stroke-width": 2,
190             "fill": null,
191             "fill-opacity":0
192         });
193         path.attr("d", line(self.displayData));
194
195         //Origdata
196         var line = d3.svg.line()
197          .x(function(d,i) {
198              return self.xScale(i) + self.graphW/32; })
199          .y(function(d,i) {
200              return self.yScale(d); })
201          .interpolate("linear");
202
203         var path = self.visG.selectAll(".OrigPath").data(self.origData);
204
205         path.enter()
206         .append("path")
207         .attr({
208             "class": "OrigPath"
209         })
210         .style({
211             "stroke": "red",
212             "stroke-width": 2,
213             "fill": null,
214             "fill-opacity":0
215         });
216         path.attr("d", line(self.origData));
217     };
```

I used two lines to implement the comparison of the overview data and the selected data. In order to draw two different lines, I stored the original display data (the y axis value) into another variable, so that each line would load their own data.