问题分析：

如果对一个 string field 进行排序，结果往往不准确，因为分词后是多个单词，在排序就不是我们想要的结果了，通常的解决方案是，将一个 string field 建立两次索引，一个分词，用来进行搜索，一个不分词，用来进行排序

创建 mapping

```
PUT /website
{
  "mappings": {
    "article": {
      "properties": {
        "title":{
          "type": "text",                         // 使用分词
          "fielddata": true,                      // 只有设置为 true 才能 开始字符串排序
          "fields": {
            "raw":{
              "type": "keyword"                   // tyep 是 keyword  不使用分词
            }
          }
        },
        "content":{
          "type": "text"
        },
        "post_date":{
          "type": "date"
        },
        "author":{
          "type": "text"
        }
      }
    }
  }
}

```

排序搜索

使用分词字段搜索排序

```
GET /website/article/_search
{
  "query": {
    "match_all": {}
  },
  "sort": [
    {
      "title": {
        "order": "asc"
      }
    }
  ]
}
```

搜索结果 按照首字母升序排，并且搜索字段被分词

```
{
  "took": 4,
  "timed_out": false,
  "_shards": {
    "total": 5,
    "successful": 5,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": 3,
    "max_score": null,
    "hits": [
      {
        "_index": "website",
        "_type": "article",
        "_id": "DXS1s2EBdXiUQYE3zPcm",
        "_score": null,
        "_source": {
          "title": "first article",
          "content": "this is my first article in elasticsearch",
          "post_date": "2018-02-20",
          "author": "daiwei"
        },
        "sort": [
          "article"
        ]
      },
      {
        "_index": "website",
        "_type": "article",
        "_id": "DnS1s2EBdXiUQYE31Pdg",
        "_score": null,
        "_source": {
          "title": "second article",
          "content": "this is my second article in elasticsearch",
          "post_date": "2018-03-20",
          "author": "zzq"
        },
        "sort": [
          "article"
        ]
      },
      {
        "_index": "website",
        "_type": "article",
        "_id": "D3S1s2EBdXiUQYE33PfR",
        "_score": null,
        "_source": {
          "title": "third article",
          "content": "this is my third article in elasticsearch",
          "post_date": "2018-04-20",
          "author": "zzw"
        },
        "sort": [
          "article"
        ]
      }
    ]
  }
}
```

使用 不分词字段进行搜索

```
GET /website/article/_search
{
  "query": {
    "match_all": {}
  },
  "sort": [
    {
      "title.raw": {
        "order": "asc"
      }
    }
  ]
}
```

搜索结果,按照搜索结构 首字母升序排列搜索字段未被分词

```
{
  "took": 1,
  "timed_out": false,
  "_shards": {
    "total": 5,
    "successful": 5,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": 3,
    "max_score": null,
    "hits": [
      {
        "_index": "website",
        "_type": "article",
        "_id": "DXS1s2EBdXiUQYE3zPcm",
        "_score": null,
        "_source": {
          "title": "first article",
          "content": "this is my first article in elasticsearch",
          "post_date": "2018-02-20",
          "author": "daiwei"
        },
        "sort": [
          "first article"
        ]
      },
      {
        "_index": "website",
        "_type": "article",
        "_id": "DnS1s2EBdXiUQYE31Pdg",
        "_score": null,
        "_source": {
          "title": "second article",
          "content": "this is my second article in elasticsearch",
          "post_date": "2018-03-20",
          "author": "zzq"
        },
        "sort": [
          "second article"
        ]
      },
      {
        "_index": "website",
        "_type": "article",
        "_id": "D3S1s2EBdXiUQYE33PfR",
        "_score": null,
        "_source": {
          "title": "third article",
          "content": "this is my third article in elasticsearch",
          "post_date": "2018-04-20",
          "author": "zzw"
        },
        "sort": [
          "third article"
        ]
      }
    ]
  }
}
```