Find the sum of number of employees in all the companies based on founded year using aggregate function

```
> db.companies.aggregate(
... [
... {$group:{_id:"$founded_year", total: { $sum: "$number_of_employees"}}}
... ]);
{ "_id" : 1982, "total" : 80667 }
{ "_id" : 1972, "total" : 10100 }
{ "_id" : 1940, "total" : 0 }
{ "_id" : 1983, "total" : 16067 }
{ "_id" : 1881, "total" : 10000 }
{ "_id" : 2010, "total" : 955 }
{ "_id" : 1981, "total" : 45348 }
{ "_id" : 1918, "total" : 0 }
{ "_id" : 1870, "total" : 0 }
{ "_id" : 1996, "total" : 27502 }
{ "_id" : 1934, "total" : 0 }
{ "_id" : 1896, "total" : 388000 }
{ "_id" : 1997, "total" : 34962 }
{ "_id" : 2000, "total" : 49827 }
{ "_id" : 1960, "total" : 4500 }
{ "_id" : 1990, "total" : 17110 }
{ "_id" : 1969, "total" : 473446 }
{ "_id" : 1958, "total" : 100 }
{ "_id" : 1906, "total" : 58400 }
{ "_id" : 1936, "total" : 600 }
Type "it" for more
```

➤ Sorting

Sorting the above result with respect to founded_year in descending order

```
Type "it" for more
> db.companies.aggregate( [ {$group:{_id:"$founded_year", total: { $sum: "$number_of_employees"}}},
... {$sort: {_id:-1}}
... ]);
{ "_id" : 2013, "total" : 235 }
{ "_id" : 2012, "total" : 1465 }
{ "_id" : 2011, "total" : 1081 }
{ "_id" : 2010, "total" : 955 }
{ "_id" : 2009, "total" : 5455 }
{ "_id" : 2008, "total" : 138962 }
{ "_id" : 2007, "total" : 29971 }
{ "_id" : 2006, "total" : 52482 }
{ "_id" : 2005, "total" : 37149 }
{ "_id" : 2004, "total" : 32659 }
{ "_id" : 2003, "total" : 26338 }
{ "_id" : 2002, "total" : 24911 }
{ "_id" : 2001, "total" : 339498 }
{ "_id" : 2000, "total" : 49827 }
{ "_id" : 1999, "total" : 123096 }
{ "_id" : 1998, "total" : 361520 }
{ "_id" : 1997, "total" : 34962 }
{ "_id" : 1996, "total" : 27502 }
{ "_id" : 1995, "total" : 33556 }
{ "_id" : 1994, "total" : 31086 }
Type "it" for more
```

➢ Filtering and Aggregation

Before aggregating filter those years that have founded year after 2005

```
>  db.companies.aggregate(
...  [
...  {$match: {founded_year:{$gt: 2005}}},
...  {$group:{_id:"$founded_year", total: { $sum: "$number_of_employees"}}},
...  {$sort: {_id:-1}}
...  ]);
{ "_id" : 2013, "total" : 235 }
{ "_id" : 2012, "total" : 1465 }
{ "_id" : 2011, "total" : 1081 }
{ "_id" : 2010, "total" : 955 }
{ "_id" : 2009, "total" : 5455 }
{ "_id" : 2008, "total" : 138962 }
{ "_id" : 2007, "total" : 29971 }
{ "_id" : 2006, "total" : 52482 }
```