```
In [42]:  housing["rooms_per_household"] = housing["total_rooms"]/housing["households"]
          housing["bedrooms_per_room"] = housing["total_bedrooms"]/housing["total_rooms"]
          housing["population_per_household"]=housing["population"]/housing["households"]

In [43]:  corr_matrix = housing.corr()
          corr_matrix["median_house_value"].sort_values(ascending=False)

Out[43]:  median_house_value          1.000000
          median_income               0.687160
          rooms_per_household         0.146285
          total_rooms                 0.135097
          housing_median_age          0.114110
          households                  0.064506
          total_bedrooms              0.047689
          population_per_household   -0.021985
          population                 -0.026920
          longitude                  -0.047432
          latitude                   -0.142724
          bedrooms_per_room          -0.259984
          Name: median_house_value, dtype: float64
```