HW #1 due by 9/23

1. Think a/b 3 Trade-offs:
    A. One interesting tradeoff in your daily life
    B. One interesting tradeoff of your major
    C. One interesting tradeoff of our society
    (don't just do googling !)

2. Average and Standard Deviation over 100M test scores:
    A. Generate 100,000,000 test scores with *μ(80,15)* and save into "scores" (vector).
    B. What is the size of the data in MB?
    C. Use my_sum() to print the sum. Is it working? What is the data type of the sum?
    D. Make my_avg() and my_sd() and see if it is close to *μ(80,15)* .
       What do you call this type of distribution?
    E. Include the **Histogram**.

3. Get a public data Set of your interest from https://www.data.go.kr/
   Get a permission! And include the "**meta data**" like the screenshot.

* Submit a MS Word document. Write everything in English. Include the references if there is any.

Meta data Example (HW #1-3)

```json
{
  "name": "경기도_정류장 주변도로 미세먼지빅데이터
    기반 대응시스템 공공데이터 조회",
  "description": "정류장 주변도로 미세먼지빅데이터
    기반 대응시스템 공공데이터 조회",
  "url": "https://www.data.go.kr/data/15062769/openapi
    .do",
  "keywords": [
    "빅데이터,버스정류장,미세먼지"
  ],
  "license": "https://data.go.kr/ugs
    /selectPortalPolicyView.do",
  "creator": {
    "name": "경기도",
    "contactPoint": {
      "contactType": "정보기획담당관",
      "telephone": "+82-03180082821",
      "@type": "ContactPoint"
    },
    "@type": "Organization"
  },
  "distribution": [
    {
      "encodingFormat": "JSON",
      "contentUrl": "https://www.data.go.kr/data
        /15062769/openapi.do",
      "@type": "DataDownload"
    }
  ],
  "@context": "https://schema.org",
  "@type": "Dataset"
}
```