

System specifications

```
!cat /proc/cpuinfo
```

```
➡ processor      : 0
   vendor_id     : GenuineIntel
   cpu family    : 6
   model         : 79
   model name    : Intel(R) Xeon(R) CPU @ 2.20GHz
   stepping      : 0
   microcode     : 0xffffffff
   cpu MHz       : 2199.998
   cache size    : 56320 KB
   physical id   : 0
   siblings      : 2
   core id       : 0
   cpu cores     : 1
   apicid        : 0
   initial apicid : 0
   fpu           : yes
   fpu_exception : yes
   cpuid level   : 13
   wp            : yes
   flags         : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss ht syscall nx pdp
   bugs          : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs taa mmio_stale_data retbleed bhi
   bogomips     : 4399.99
   clflush size  : 64
   cache_alignment : 64
   address sizes : 46 bits physical, 48 bits virtual
   power management:

   processor      : 1
   vendor_id     : GenuineIntel
   cpu family    : 6
   model         : 79
   model name    : Intel(R) Xeon(R) CPU @ 2.20GHz
   stepping      : 0
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siblings      : 2
core id       : 0
cpu cores     : 1
apicid        : 1
initial apicid : 1
fpu           : yes
fpu_exception : yes
cpuid level   : 13
wp            : yes
flags         : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ss ht syscall nx pdp
bugs          : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs taa mmio_stale_data retbleed bhi
bogomips      : 4399.99
clflush size  : 64
cache_alignment : 64
address sizes  : 46 bits physical, 48 bits virtual
power management:
```

Double-click (or enter) to edit

Ram info

```
!cat /proc/meminfo
```

```
➡ MemTotal:      13290460 kB
  MemFree:       7195644 kB
  MemAvailable:  12120052 kB
  Buffers:       389784 kB
  Cached:        4657584 kB
  SwapCached:    0 kB
  Active:        714360 kB
  Inactive:      5037100 kB
  Active(anon):  1296 kB
  Inactive(anon): 704440 kB
  Active(file):  713064 kB
  Inactive(file): 4332660 kB
  Unevictable:   8 kB
  Mlocked:       8 kB
  SwapTotal:     0 kB
```

SwapFree:	0 kB
Dirty:	248 kB
Writeback:	0 kB
AnonPages:	704124 kB
Mapped:	328364 kB
Shmem:	1636 kB
KReclaimable:	204088 kB
Slab:	249488 kB
SReclaimable:	204088 kB
SUnreclaim:	45400 kB
KernelStack:	5920 kB
PageTables:	11152 kB
SecPageTables:	0 kB
NFS_Unstable:	0 kB
Bounce:	0 kB
WritebackTmp:	0 kB
CommitLimit:	6645228 kB
Committed_AS:	3053804 kB
VmallocTotal:	34359738367 kB
VmallocUsed:	12280 kB
VmallocChunk:	0 kB
Percpu:	1120 kB
HardwareCorrupted:	0 kB
AnonHugePages:	0 kB
ShmemHugePages:	0 kB
ShmemPmdMapped:	0 kB
FileHugePages:	0 kB
FilePmdMapped:	0 kB
CmaTotal:	0 kB
CmaFree:	0 kB
Unaccepted:	0 kB
HugePages_Total:	0
HugePages_Free:	0
HugePages_Rsvd:	0
HugePages_Surp:	0
Hugepagesize:	2048 kB
Hugetlb:	0 kB
DirectMap4k:	80696 kB
DirectMap2M:	5158912 kB
DirectMap1G:	10485760 kB

installing libraries

```
!pip install pandas
```

```
Requirement already satisfied: pandas in /usr/local/lib/python3.11/dist-packages (2.2.2)  
Requirement already satisfied: numpy>=1.23.2 in /usr/local/lib/python3.11/dist-packages (from pandas) (1.26.4)  
Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.11/dist-packages (from pandas) (2.8.2)  
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas) (2025.1)  
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas) (2025.1)  
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.8.2->pandas) (1.17.0)
```

manipulating with the file

```
import pandas as pd
```

```
df = pd.read_csv('/content/sample_data/california_housing_test.csv')  
df.head()
```

	longitude	latitude	housing_median_age	total_rooms	total_bedrooms	population	households	median_income	median_house_value
0	-122.05	37.37	27.0	3885.0	661.0	1537.0	606.0	6.6085	344700.0
1	-118.30	34.26	43.0	1510.0	310.0	809.0	277.0	3.5990	176500.0
2	-117.81	33.78	27.0	3589.0	507.0	1484.0	495.0	5.7934	270500.0
3	-118.36	33.82	28.0	67.0	15.0	49.0	11.0	6.1359	330000.0
4	-119.67	36.33	19.0	1241.0	244.0	850.0	237.0	2.9375	81700.0

Next steps:

[Generate code with df](#)[View recommended plots](#)[New interactive sheet](#)

list files

```
!ls
```

```
sample_data
```

