CSV

```
import csv
students=[
    ['name','age','grade'],
    ['mayuri',20,'O'],
    ['ganesh',21,'A'],
    ['pranitha',20,'A']
]
with open("students.csv",mode='w',newline="")as file:
  writer=csv.writer(file)
  writer.writerows(students)
  print("students.csv created successfully!")
```

```
students.csv created successfully!
```

```
from google.colab import files
files.upload()
```

```
Choose Files Employee.csv
Employee.csv(text/csv) - 123 bytes, last modified: 12/11/2025 - 100% done
Saving Employee.csv to Employee.csv
{'Employee.csv': b'Name
```

```
import csv
with open("Employee.csv", mode="r") as file:
    reader = csv.reader(file)

    for row in reader:
        print(row)
```

```
['Name ', 'Age', 'Grade']
['Sai', '18', 'A']
['Ram', '20', 'B']
['Seetha', '19', 'O']
['Geetha', '18', 'C']
['Reenu', '18', 'A']
['Seema', '20', 'A']
['Kumar', '20', 'B']
['Vijay', '19', 'O']
['Karan', '19', 'B']
```

```
from google.colab import files
files.upload()
```

```
Choose Files data.json
data.json(application/json) - 163 bytes, last modified: 12/12/2025 - 100% done
Saving data.json to data.json
{'data.json': b'{\r\n  "id": 101,\r\n  "name": "Arun",\r\n  "age": 19,\r\n  "course": "Computer Science",\r\n  "marks": {\r\n
"math": 85,\r\n    "science": 78,\r\n    "english": 90\r\n  }\r\n}\r\n\r\n'}
```

```
import csv
with open("Products.csv", mode="r") as file:
    reader = csv.reader(file)
    for row in reader:
        print(row[0])
```

```
Name
Tablet
Smart Blender
Radio
Eco Radio
Keyboard
Mouse
```

```
import csv
with open("Employee.csv", mode="r") as file:
    reader = csv.DictReader(file)
    for row in reader:
        print(row['Name '],row['Grade'],row['Age'])
```

```
Sai A 18
Ram B 20
Seetha O 19
Geetha C 18
Reenu A 18
Seema A 20
Kumar B 20
Vijay O 19
Karan B 19
```

```
import csv
new_row=["Mayuri","Maths",98]
with open("Marks.csv",mode="a",newline="")as file:
  writer=csv.writer(file)
  writer.writerow(new_row)
  print("New row added successfully!")
```

```
New row added successfully!
```

```
import csv
with open("Employee.csv","r")as file:
  reader=csv.reader(file)
  next(reader)
  row_count=sum(1 for row in reader)
  print("Number of rows in the file is:",row_count)
```

```
Number of rows in the file is: 9
```

```
import csv
total_sales = 0
with open("sales.csv", "r") as file:
    reader = csv.reader(file)
    next(reader)
    for row in reader:
        price = float(row[1])
        quantity = int(row[2])
        total_sales += price * quantity
print("Total sales:", total_sales)
```

```
Total sales: 5780.0
```

```
import csv
data=[
    ['Name','ID'],
    ['Mayuri',101],
    ['Ganesh',102],
    ['Pranitha',103]
]
with open("student.csv","w",newline="")as file:
  write=csv.writer(file)
  write.writerows(data)
  print("student csv created sucessfully")
```

```
student csv created sucessfully
```

```
import csv

with open("people.csv", "r") as file:
    reader = csv.reader(file)
    header = next(reader)
    age_index = header.index("Age")

    for row in reader:
        if int(row[age_index]) > 30:
            print(row)
```

```
['Seetha', '42']
['Geetha', '39']
['Reenu', '33']
['Kumar', '35']
['Vijay', '38']
['Karan', '40']
```

```
import csv
with open("source.csv","r")as source_file:
  reader=csv.reader(source_file)
  with open("copy.csv","w",newline="")as copy_file:
    writer=csv.writer(copy_file)
    for row in reader:
      writer.writerow(row)
print("contents are copited from source file to copyfile")
```

```
contents are copited from source file to copyfile
```

JSON

```
import json
data="{'name': 'Alex', 'age': 22, 'city': 'Chennai'}"
data=data.replace("'",'"')
json_dict=json.loads(data)
print(json_dict)
```

```
{'name': 'Alex', 'age': 22, 'city': 'Chennai'}
```

```
import json
data={'id': 101, 'product': 'Laptop', 'price': 55000}
json_string=json.dumps(data)
print(json_string)
```

```
{"id": 101, "product": "Laptop", "price": 55000}
```

```
import json

with open("data.json", "r") as file:
    data = json.load(file)

for key, value in data.items():
    print(key, ":", value)
```

```
id : 101
name : Arun
age : 19
course : Computer Science
marks : {'math': 85, 'science': 78, 'english': 90}
```

```
import json
data={'name': 'Mia', 'age': 24, 'grade': 'A'}
with open("student.json","w")as file:
  json.dump(data,file)
  print("data is entered into students json")
```

```
data is entere into students json
```

```
import json
data={'employee': {'name': 'John', 'age': 30, 'department': 'HR'}}
print('Department:',data['employee']['department'])
```

```
Department: HR
```

```
import json
data={'name': 'Raj', 'age': 45}
data['age']=50
json_string=json.dumps(data)
print(json_string)
```

```
{"name": "Raj", "age": 50}
```

```
import json
data=['red', 'green', 'blue']
json_string=json.dumps(data)
print(data[1])
```

```
green
```

```
import json
students={'users': [{'id':1,'name':'Alex'}, {'id':2,'name':'Mia'}]}
for user in students['users']:
  print(user['name'])
```

```
Alex
Mia
```

```
import json
data={'name': 'Sam', 'age': 28}
data['country']='India'
json_string=json.dumps(data)
print(json_string)
```

```
{"name": "Sam", "age": 28, "country": "India"}
```

```
import json
items = [
    {'item': 'Pen', 'price': 10},
    {'item': 'Book', 'price': 50},
    {'item': 'Bag', 'price': 700}
]
with open("items.json", "w") as file:
    json.dump(items, file, indent=4)
with open("items.json", "r") as file:
    data = json.load(file)
total_cost = sum(item['price'] for item in data)
print("Total cost:", total_cost)
```

```
Total cost: 760
```