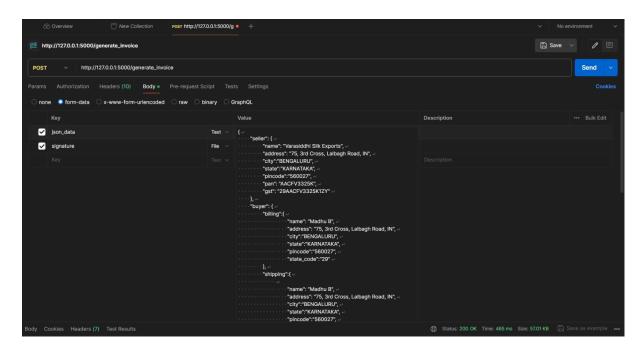
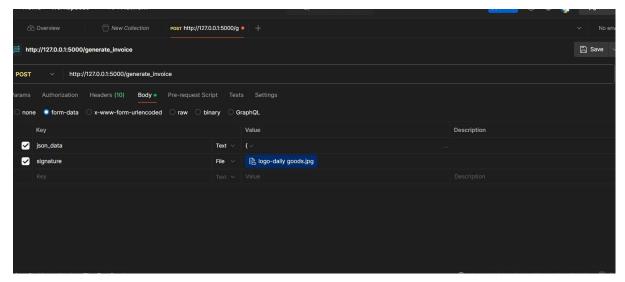
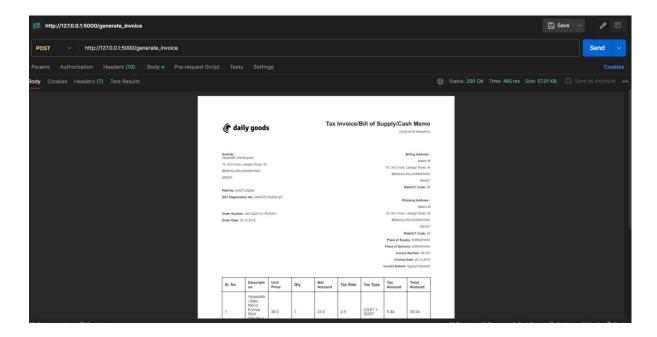
This is an API which can be used to generate invoices by providing the data in the multipart file format.

Here is the image showing the request from the postman:-





And when it is a successful request then this pdf response will be generated —



And the pdf file generated is :-

invoice.pdf

Now let's dive into how application is working in the backend :-

When post request with content type multipart/form-data having signature image and json string with the data hits the generate_invoice endpoint

- 1. Firstly it checks that the signature is present or not in the request.
 - If the signature is not present then it will return back error message signature not present
 - If the signature is present then the signature will be saved inside the server at the given path
- 2. It will check for Json string is present or not
 - If the Json string is not present it will return back error message Json string not present
 - If the Json string is present then it will move to the next step

- 3. Now it will try to change string into the Json object
 - If the string is not convertible to the json object ,it will return the json decode error ,having error message invalid json data
 - If the string will be converted to json object and will be stored in the variable name invoice, it will move to the next step
- 4. Now the json data will be validated against the schema present in the application
 - If the validation will be returned False, then the application will return an error which was returned by the validation function.
 - If the validation will be returned True ,the application will move to the next step
- 5. Now the values which need to be computed for the items which were given in the assignment, i.e Net Amount, Tax Type, Tax Amount, Total Amount, Amount in words will be appended in the item details and then other details like Total Tax Amount, Total Amount, Total Tax and Amount in words will also be appended in the data.
- 6. Now the updated data with the computed value will be passed to the HTML template for rendering the data ,signature and logo accordingly to the HTML file
- 7. Now after rendering the data, the HTML file will be converted to PDF with the help of weasyprint library of python
- 8. Now this PDF file will be sent back as response with download name invoice.pdf as an attachment with content type application/pdf

Json Schema for entering the data:-

```
{
   "seller": {
     "name": str,
     "address": str,
     "city": str,
     "state": str,
     "pincode": str,
     "pan": str,
     "gst": str
  },
   "buyer": {
     "billing": {
        "name": str,
        "address": str.
        "city": str,
        "state": str,
        "pincode": str,
```

```
"state_code": str
     },
     "shipping": {
        "name": str,
        "address": str,
        "city": str,
        "state": str,
        "pincode": str,
        "state_code": str
     }
  },
  "order_detail": {
     "order_number": str,
     "order_date": str
  },
  "invoice_details": {
     "invoice_number": str,
     "invoice_date": str,
     "invoice_detail": str
  },
  "place_of_supply": str,
  "place_of_delivery": str,
  "item_values": [{
     "description": str,
     "unit_price": float,
     "quantity": int,
     "discount": int,
     "net_amount": float,
     "tax_rate": float
  }],
  "reverse_charge": str
}
```