

```
package main

import (
    "encoding/csv"
    "encoding/json"
    "fmt"
    "io"
    "io/ioutil"
    "log"
    "net/http"
    "os"
    "strconv"
    "time"

    "github.com/confluentinc/confluent-kafka-go/kafka"
    "github.com/gorilla/mux"
)

// Csv location structure
type Csv struct {
    Location string `json:"location"`
}

func main() {
    // messages := make(chan string, 600)
    router := mux.NewRouter().StrictSlash(true)
    router.HandleFunc("/csv", csvPostHandler).Methods("POST")

    log.Fatal(http.ListenAndServe(":9090", router))
    // getCsvFile("data.csv")
}

func csvPostHandler(w http.ResponseWriter, r *http.Request) {

    //Retrieve body from http request
    b, err := ioutil.ReadAll(r.Body)
    defer r.Body.Close()
    if err != nil {
        panic(err)
    }

    //Save data into Csv struct
    var csvLocation Csv
```

```
$ clear

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-producer
$ go run main.go
locationString is: final.csv
sending line to kafka topic: 16879,13177
sending line to kafka topic: fableland,fableland
sending line to kafka topic: 16517,6527
sending line to kafka topic: lissotrichy,cachemic,crofterize
sending line to kafka topic: 9710
sending line to kafka topic: multiciliate,aurichlorohydric,semi
extinct,envy
sending line to kafka topic: 16477,6892
sending line to kafka topic: cGFpbgo=,bescreen
sending line to kafka topic: 13612
sending line to kafka topic: meteorolitic,gewless,parivicular
sending line to kafka topic: 12650,12389,19790
sending line to kafka topic: funnelllike,seton
sending line to kafka topic: 8997,8075,18482
sending line to kafka topic: ponier,ponier,NjcxNwo=,gelly
sending line to kafka topic: 13975
sending line to kafka topic: undies,haler,fetal
sending line to kafka topic: 8387,13186,3632,4384
sending line to kafka topic: shanker,fairy,subfossorial,Xylebor

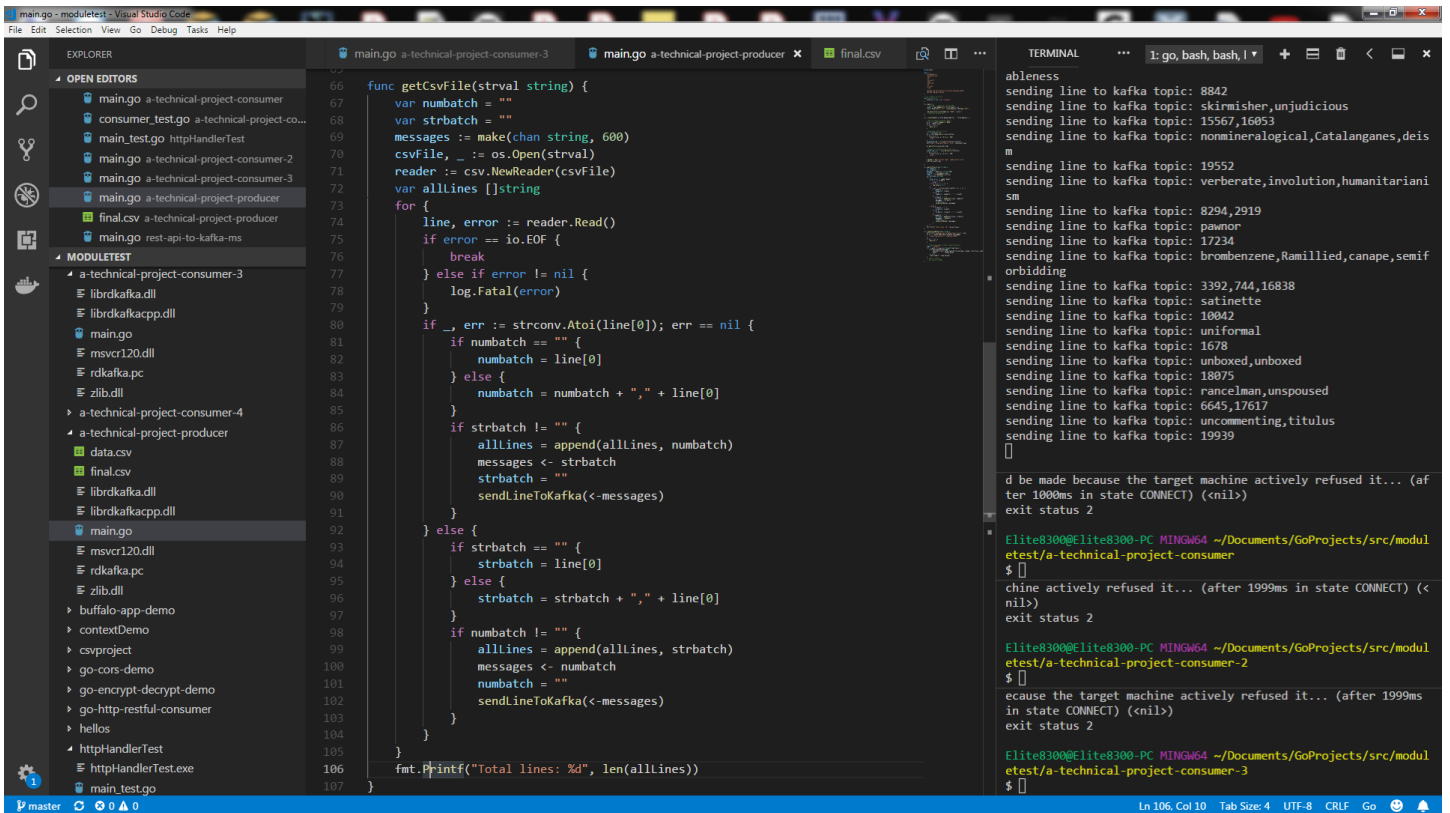
d be made because the target machine actively refused it... (af
ter 1000ms in state CONNECT) (<nil>)
exit status 2

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-consumer
$ 
chine actively refused it... (after 1999ms in state CONNECT) (<
nil>)
exit status 2

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-consumer-2
$ 
ecause the target machine actively refused it... (after 1999ms
in state CONNECT) (<nil>)
exit status 2

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-consumer-3
$ 
```

Fig 1: Producer main.go file showing the POST endpoint that gives the CSV file location



```
func getCsvFile(strval string) {
    var numbatch = ""
    var strbatch = ""
    messages := make(chan string, 600)
    csvFile, _ := os.Open(strval)
    reader := csv.NewReader(csvFile)
    var alllines []string
    for {
        line, error := reader.Read()
        if error == io.EOF {
            break
        } else if error != nil {
            log.Fatal(error)
        }
        if _, err := strconv.Atoi(line[0]); err == nil {
            if numbatch == "" {
                numbatch = line[0]
            } else {
                numbatch = numbatch + "," + line[0]
            }
        }
        if strbatch != "" {
            alllines = append(alllines, numbatch)
            messages <- strbatch
            strbatch = ""
            sendLineToKafka(<-messages)
        }
    }
    if strbatch == "" {
        strbatch = line[0]
    } else {
        strbatch = strbatch + "," + line[0]
    }
    if numbatch != "" {
        alllines = append(alllines, strbatch)
        messages <- numbatch
        numbatch = ""
        sendLineToKafka(<-messages)
    }
}

fmt.Printf("Total lines: %d", len(alllines))
```

```
ableness
sending line to kafka topic: 8842
sending line to kafka topic: skirmisher,unjudicious
sending line to kafka topic: 15567,16053
sending line to kafka topic: nonminerological,Catalanganes,deis
sending line to kafka topic: 19552
sending line to kafka topic: verberate,involution,humanitariani
sm
sending line to kafka topic: 8294,2919
sending line to kafka topic: pawmor
sending line to kafka topic: 17234
sending line to kafka topic: brombenzene,Ramillied,canape,semif
orbidding
sending line to kafka topic: 3392,744,16838
sending line to kafka topic: satinette
sending line to kafka topic: 10042
sending line to kafka topic: uniformal
sending line to kafka topic: 1678
sending line to kafka topic: unboxed,unboxed
sending line to kafka topic: 18075
sending line to kafka topic: rancel1man,unspoused
sending line to kafka topic: 6645,17617
sending line to kafka topic: uncommeniting,tituluss
sending line to kafka topic: 19939

d be made because the target machine actively refused it... (af
ter 1000ms in state CONNECT) (<nil>)
exit status 2

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-consumer
$ 
chine actively refused it... (after 1999ms in state CONNECT) (<
nil>)
exit status 2

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-consumer-2
$ 
ecause the target machine actively refused it... (after 1999ms
in state CONNECT) (<nil>)
exit status 2

Elite8300@Elite8300-PC MINGW64 ~/Documents/GoProjects/src/moduletest/a-technical-project-consumer-3
$ 
```

Fig 2: getCsvFile() method that gets the file, parses it and batches up integers and strings before sending it to Kafka topic

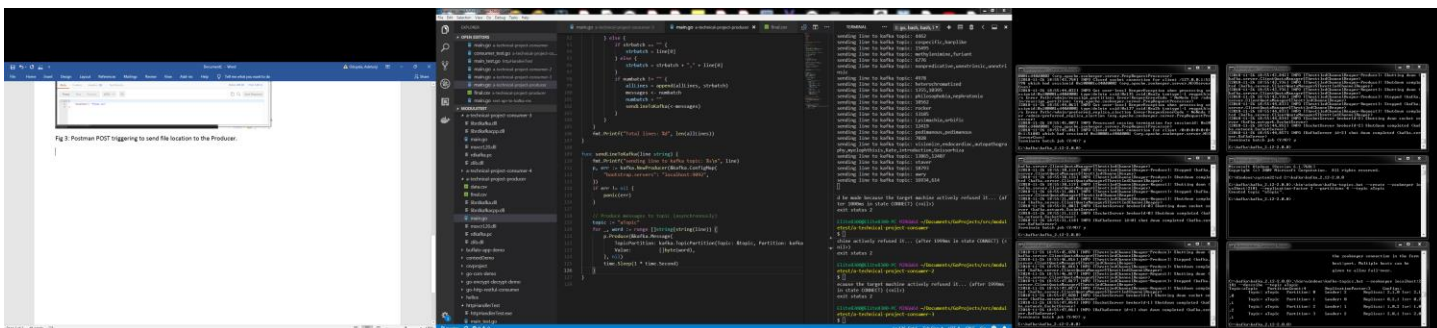


Fig 3: `sendLineToKafka()` method that sends batched values to Kafka topic. Note that the values sent are unsorted batched up integer values or string values.

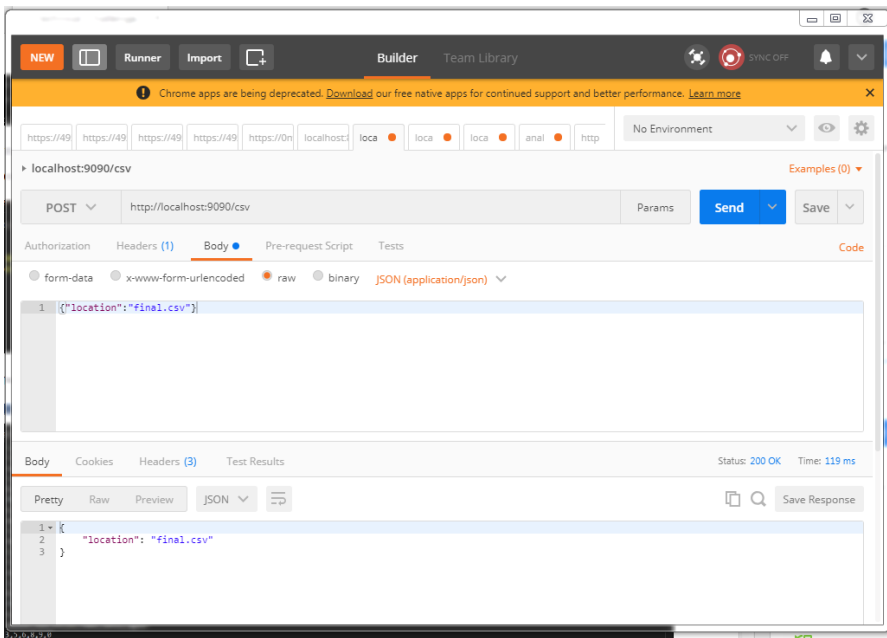


Fig 4: Postman POST triggering to send file location to the Producer.

