

# Group Project: Covid Origins

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## Background

The World Health Organization has recently employed a new data science initiative, *CSIT-165*, that uses data science to characterize pandemic diseases. *CSIT-165* disseminates data driven analyses to global decision makers.

*CSIT-165* is a conglomerate comprised of two fabricated entities: *Global Health Union (GHU)* and *Private Diagnostic Laboratories (PDL)*. Your and your partner's role is to play a data scientist from one of these two entities.

## Data

2019 Novel Coronavirus COVID-19 (2019-nCoV) Data Repository by John Hopkins CSSE

Data for 2019 Novel Coronavirus is operated by the John Hopkins University Center for Systems Science and Engineering (JHU CSSE). Data includes daily time series CSV summary tables, including confirmations, recoveries, and deaths. Country/region are countries/regions that conform to World Health Organization (WHO). Lat and Long refer to coordinates references for the user. Date fields are stored in MM/DD/YYYY format.

## Project Objectives

### Objective 1

*Predict where the origin started based on the area with the greatest number of confirmations and deaths on the first recorded day in the data set. Show this is the origin using an if statement.*

```
#find max value in column (10.22.20)
#check to see how many max location there is
#run conditional loop
max_value <- 0
RowMax <- 0
```

```

for(i in 1:nrow(deaths_global))
{
  num <- deaths_global[i,5]

  if (num > max_value)
  {
    max_value <- num
    RowMax <- i
  }

  #province.state
  Acol <- deaths_global[RowMax,1]
  #county.region
  Bcol <- deaths_global[RowMax,2]
  #latitude
  Ccol <- deaths_global[RowMax,3]
  #longitude
  Dcol <- deaths_global[RowMax,4]
  #deaths on 21.22.20 (date)
  DeathVal <- deaths_global[RowMax,5]
}

cat(Acol,",", " ", Bcol,",", " ", Ccol,",", " ", Dcol,",", " ", DeathVal, "\n")

## Hubei , China , 30.9756 , 112.2707 , 17

```

Objective 2

Objective 3

Objective 4

Objective 4.1

Objective 4.2

GitHub Log

```

git log --pretty=format:"%nSubject: %s%nAuthor: %aN%nDate: %aD%nBody: %b"

##
## Subject: Merge branch 'main' of github.com:Figgs0bit/CSIT165-CovidGroupProj
## Author: Sal - Figgs0bit
## Date: Mon, 24 Mar 2025 17:34:18 -0700
## Body:
##
## Subject: added {r Data setup} chunk. Downloads csv from repository to dataframe
## Author: Sal - Figgs0bit
## Date: Mon, 24 Mar 2025 17:34:05 -0700
## Body:
##
## Subject: Uploaded data
## Author: Figgs0bit
## Date: Mon, 24 Mar 2025 17:14:29 -0700

```

## Body: time\_series\_covid19 data (global deaths, global recovered)  
##  
## Subject: Merge branch 'main' of github.com:Figgs0bit/CSIT165-CovidGroupProj  
## Author: Sal - Figgs0bit  
## Date: Mon, 24 Mar 2025 17:12:01 -0700  
## Body:  
##  
## Subject: Template knited to PDF w/o (\usepackage{tabu}, library(kableExtra))  
## Author: Sal - Figgs0bit  
## Date: Mon, 24 Mar 2025 17:11:54 -0700  
## Body:  
##  
## Subject: Update README.md  
## Author: Figgs0bit  
## Date: Mon, 24 Mar 2025 17:10:19 -0700  
## Body: Contains copy of Group Contract  
##  
## Subject: First Commit: setting up Github repository need to add template  
## Author: Sal - Figgs0bit  
## Date: Mon, 24 Mar 2025 17:05:25 -0700  
## Body:  
##  
## Subject: Initial commit  
## Author: Figgs0bit  
## Date: Mon, 24 Mar 2025 17:00:21 -0700  
## Body: