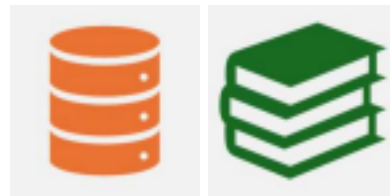


# Programming for AI

Abdul Haseeb

## Dictionary



DATA STRUCTURE IN PYTHON DICTIONARY IS A  
KEY VALUE PAIR.

## Creating a Dictionary

```
code_and_subjects={"ARI-201":"Programming", "CSC-205":  
                    "Artificial Intelligence",  
                    "CSC-206":"Software Engineering"}
```

## Accessing the elements of Dictionary

- Access the elements, with key •  
`code_and_subjects["ARI-201"]`

# Deleting element from a dictionary

- `del code_and_subjects["ARI-201"]`
- `code_and_subjects.pop("CSC-201")`

# Adding a new Element

- `codes_and_subjects["CSC221"]="Data Structures"`

`for i in codes_and_subjects:`

## Iterating a dictionary using a for loop

```
print(codes_and_subjects[i])
```

# Interactive coding Task

- Create a dictionary which contains

Percentage	Interpretation
90-100	Outstanding
80-89	Good

5 student names and scores as a number,

## List Inside a dictionary

```
travel_log={  
    "France" : ["Paris", "Lile", "Dijon"],  
    "Germany":["Berlin", "Hamburg", "Stuttgart"]  
}
```



# Dictionary Inside Dictionary



```
travel_log={  
    "France" : {"cities_visited" : ["Paris", "Lille", "Dijon"], "total_visits":12},  
    "Germany":["Berlin", "Hamburg", "Stuttgart"]  
}
```





## Dictionary Inside a List







## Dictionary inside a list



```
travel_log=[  
  {"country": "france", "total_visits": 12},  
  {"country": "Germany", "total_visits": 10}  
]
```



# Interactive coding Task

- Create a list called `travel_log`, which contains a dictionary in which you have following key-value pairs:
  - Country name
  - Total Visits
- Create a function called `add_new_country`, which adds a new country as a dictionary to this list, this function accepts country name and total visits as a parameter.

## The Black Jack Game (get as close to 21)

- King Queen and Jack Count as 10



# Assignment#02



# Scope





# Local Scope .

Program gives an error



# Global Scope

- Available every where in the file after it is defined

## Block scope

- There is no block scope in python, means if anything is created inside if, for etc, then it can be accessed outside it

- This code works fine and prints,



skeleton

But we have function scope • This code will result



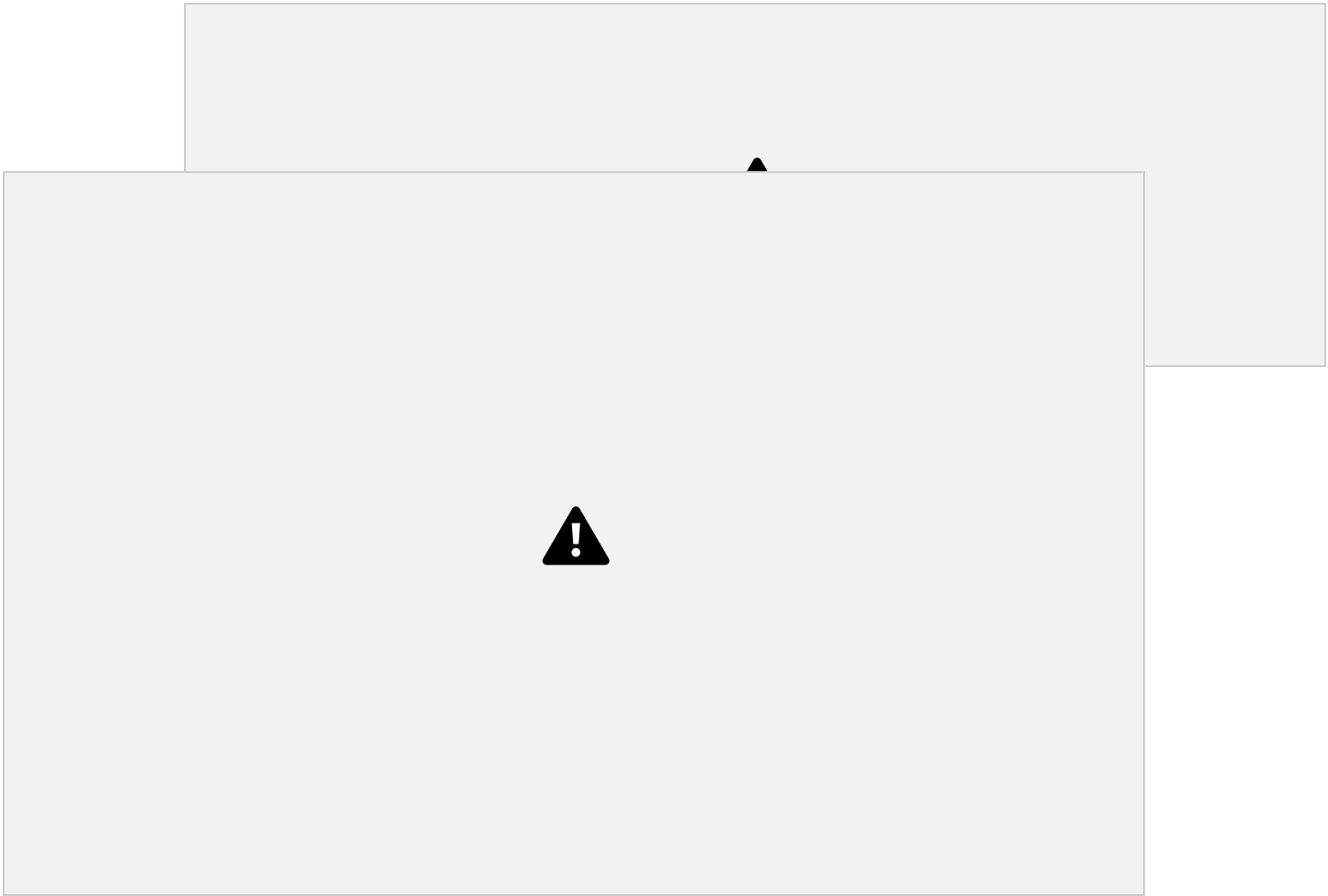
in an error

Using global keyword











# Program Requirements

- Print Report
- Check Resources Sufficient • Process  
Coins • Check Transactions Successful •  
Make Coffee