

# Kendriya Vidyalay



केन्द्रीय विद्यालय संगठन

## CHITTARAJAN

COMPUTER  
SCIENCE

**TOPIC: - MIND CRUSHER**

**AISSCE - 2021**

**NAME: - AMBER KUMAR SINGH**

**CLASS: - XII**

**SEC: - A**

**ROLL NO.: 12626384**

**SUBMITTED TO: - Mr. ANSHUMAN SIR**

# CERTIFICATE

This is certify that

AMBER KUMAR SINGH

Of Class XII 'A', Roll No. - \_\_\_\_\_

Session – 2020-21 , has worked on the

Project “MIND CRUSHER” under the

guidance of Mr. Anshuman sir

and successfully completed it.

DATE:- \_\_\_\_\_

\_\_\_\_\_  
Internal examiner

\_\_\_\_\_  
Examiner"s Sign

\_\_\_\_\_  
Sign Of Principal

(KENDRIYA VIDYALAYA CHITTARAJAN)

# ACKNOWLEDGEMENT

.....

I would like to express a deep sense of thanks & gratitude to my project guide Mr. Anshuman Sir for guiding me immensely through the course of the project. He always evinced keen interest in my work. His constructive advice & constant motivation have been responsible for the successful completion of this project.

My sincere thanks go to Sh.P.K. Tailor, Our Principal Sir, for his co-ordination in extending every possible support for the completion of this project.

I also thank to my parents for this motivation & support.

LAST BUT NOT LEAST; I would like to thank all those who had helped directly OR indirectly towards the completion of this project.

**AMBER KUMAR SINGH.....**

**Class: XII 'A'**

# DECLARATION

I hereby declare that the project work entitled "MIND CRUSHER", submitted to Department Of Computer Science in "Kendriya Vidyalaya Chittaraja" is prepared by me. All the coding is result of my personal efforts. I am also uploaded the code to Github for a soft copy reference. **The link is given below** 📌

📌 <https://github.com/Amberskumarsingh/Computer-Science-Investigatory-Project-12-MIND-CRUSHER-PYTHON-EITH-JSON-WORK.git> 📌

OR



AMBER KUMAR SINGH  
CLASS XII "A"



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# ABOUT THE PROJECT

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This project is a quiz game, which asks ten MCQ based question to the user, and then calculates and displays the score at the end. The questions, along with its respective options, are saved in a JSON file.

\*\*\*\*\*

# SYSTEM REQUIREMENTS

## 1. Operating System:

- Any version of Windows, between Windows 7 to Windows 10
- Mac OS X 10.11 or higher, 64 bit
- Linux: RHEL 6/7, 64-bit (almost all libraries also work in Ubuntu)

## 2. x86 64-bit Or 32-bit CPU (Intel / AMD architecture)

## 3. **4 GB** RAM

## 4. **5 GB** free disk space

# HARDWARE AND SOFTWARE USED

1. Operating System: Windows 10 Pro (Version 20H2)
2. RAM: 4 GB DDR3 (3.89 GB usable)
3. Processor: Intel(R) Pentium(R) CPU G630 @ 2.70GHz  
2.70 GHz (x64-based processor)
4. Storage: 465.5 GB



# PACKAGES AND MODULES USED

\*\*\*\*\*

- 1.json
- 2.random
- 3.time
- 4.os

.....

# WORKING DESCRIPTION

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When the program is run, it displays the main menu of the game, in the Shell window. The main menu has four options, Play Quiz, Instructions, Exit and About Us. When the first option is chosen, the game begins and various questions (stored in the JSON file), are displayed on the screen, along with their four respective options. On choosing the second option in the main menu, the instructions are displayed and the user is returned to the main menu. When the third option is chosen, the program is terminated, and a message is displayed. On choosing the About Us option, the About Us message is displayed.

.....

# CODING

```

Python 3.8.5 Shell - C:\Users\Nikhil\Desktop\New folder\MCQ Quiz.py (3.8.5)
File Edit Format Run Options Window Help

import random
import json

def play():
    print("=====QUIZ START=====")
    score = 0
    with open("q-opts-no.json", 'r') as f:
        q_opts = json.load(f)
        for i in range(10):
            no_of_questions = len(q_opts)
            qn = random.randint(0, no_of_questions-1)
            print(f"Q{qn+1}: {q_opts[qn]['question']}")
            for option in q_opts[qn]['options']:
                print(option)
            answer = input("Enter your answer: ")
            if q_opts[qn]['answer'] == answer[0].upper():
                print("You are correct")
                score += 1
            else:
                print("You are incorrect")
        print(f"FINAL SCORE: {score}")

def rules():
    print("=====RULES=====")
    # 1. Each round consists of 10 random questions. To answer, you must press ENTER (not spacebar).
    # 2. Your final score will be given at the end.
    # 3. Each question consists of 1 point. There's no negative point for wrong answers.
    print("")

def about():
    print("=====ABOUT=====")
    # This project has been developed by
    # NAME: NIKHIL ROLL NO.
    # 1) AFTER 1
    # 2) ANISH 2
    # 3) ANSHU 3
    # 4) SHANMUKH 4
    print("Presented to All Friends of Friends of Friends, CHITTORGAR")

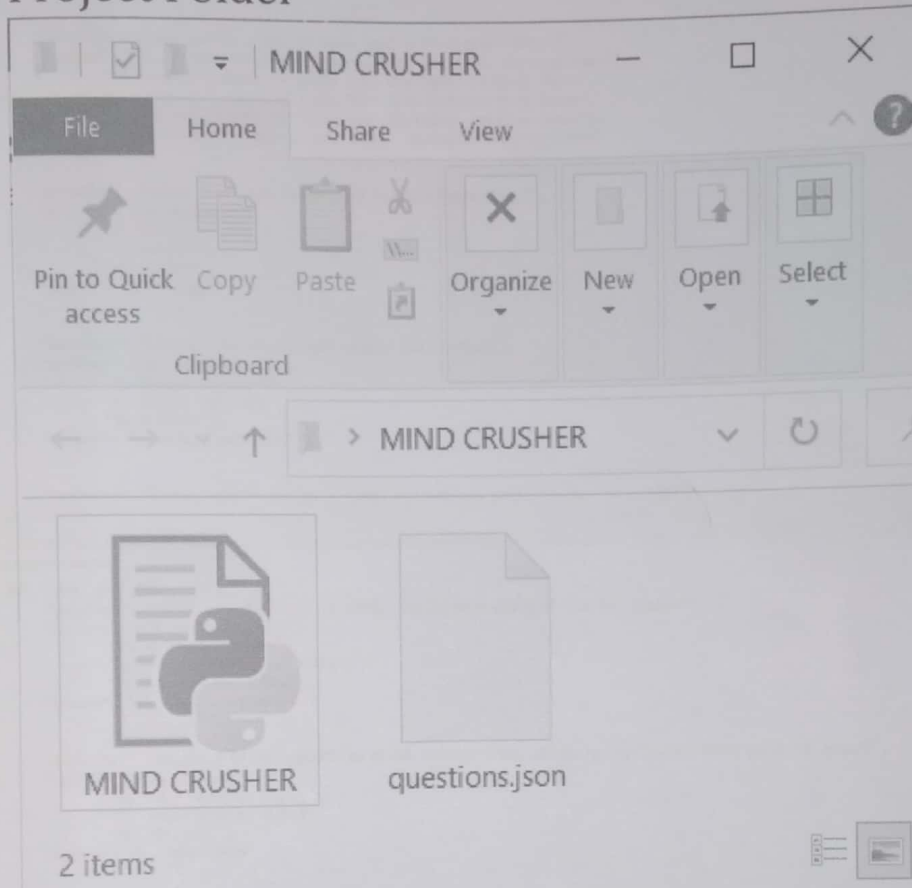
if __name__ == '__main__':
    choice = 1
    while choice != 0:
        print("=====WELCOME TO NIKHIL'S QUIZ=====")
        print("1. PLAY QUIZ")
        print("2. SEE INSTRUCTIONS ON HOW TO PLAY THE GAME")
        print("3. ABOUT US")
        print("4. EXIT")
        choice = int(input("ENTER YOUR CHOICE: "))
        if choice == 1:
            play()
        elif choice == 2:
            rules()
        elif choice == 3:
            about()
        elif choice == 4:
            time.sleep(3)
            print("THANK YOU FOR PLAYING OUR GAME. SEE YOU SOON")
            os._exit(0)
        else:
            print("INVALID INPUT. TRY AGAIN")
            continue

```

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# INPUT AND OUTPUT SCREENS

## 1. Project Folder



## 2. json file

```

questions - Notepad
File Edit Format View Help
[
  "question": "When does India celebrate Independence Day?",
  "options": ["A. 15th August",
    "B. 2nd October",
    "C. 26th January",
    "D. 4th July"],
  "answer": "A. 15th August"
],
[
  "question": "Nobel prize is awarded for which of the following disciplines?",
  "options": ["A. Literature, peace and economics",
    "B. Medicine or Physiology",
    "C. Chemistry and Physics",
    "D. All the above"],
  "answer": "D. All the above"
],
[
  "question": "What is the theme of Asia health conference 2019?",
  "options": ["A. Competitiveness of India Inc- India@60: Forging Ahead",
    "B. Competitiveness of India Inc- India@75: Forging Ahead",
    "C. Competitiveness of India Inc- India@80: Forging Ahead",
    "D. Competitiveness of India Inc- India@90: Forging Ahead"],
  "answer": "B. Competitiveness of India Inc- India@75: Forging Ahead"
],
[
  "question": "Which state has introduced new kin technology?",
  "options": ["A. Assam",
    "B. Delhi",
    "C. Haryana",
    "D. Punjab"],
  "answer": "D. Punjab"
],
[
  "question": "Who has won pro Kabadi League this season?",
  "options": ["A. Dabang Delhi",
    "B. Bengal Warriors",
    "C. Puneri paltan",
    "D. U Mumba"],
  "answer": "B. Bengal Warriors"
],
[
  "question": "First private train in India run between which of the two cities?"
]
Ln 1, Col 1 100% Unix (LF) UTF-8

```

```

questions - Notepad
File Edit Format View Help
[
  "question": "First private train in India run between which of the two cities?",
  "options": ["A. Delhi-Lucknow",
    "B. Delhi-Ahmedabad",
    "C. Both of the above route",
    "D. None of the above"],
  "answer": "A. Delhi-Lucknow"
],
[
  "question": "As per a latest report by Brand Finance 2019, which is the India's most valuable brand?",
  "options": ["A. Reliance",
    "B. Tata Group",
    "C. State Bank of India",
    "D. Flipkart"],
  "answer": "B. Tata Group"
],
[
  "question": "At the end of March 2019, what was the amount of India's external debt?",
  "options": ["A. US $ 540 billion",
    "B. US $ 543 billion",
    "C. US $ 547 billion",
    "D. US $ 541 billion"],
  "answer": "B. US $ 543 billion"
],
[
  "question": "'LIBRA' an alternative of existing cryptocurrency like bitcoin is being developed by?",
  "options": ["A. Facebook",
    "B. Google",
    "C. Microsoft",
    "D. None of the above"],
  "answer": "A. Facebook"
],
[
  "question": "In which year was Sports Authority of India established?",
  "options": ["A. 1952",
    "B. 1967",
    "C. 1993",
    "D. 1982"],
  "answer": "D. 1982"
],
[
  "question": "Headquarter of International Olympic Committee is situated at?",
  "options": ["A. Athens"]
]
Ln 1, Col 1 100% Unix (LF) UTF-8

```



```
questions - Notepad
File Edit Format View Help
"options": ["A. Athens",
            "B. Lausanne",
            "C. Dubai",
            "D. None of the above"],
"answer": "B. Lausanne"
},
{
"question": "'The Coalition Years' is the autobiography of?",
"options": ["A. L.K Advani",
            "B. Pranab Mukherjee",
            "C. Atal Behari Vajpayee",
            "D. Sonia Gandhi"],
"answer": "B. Pranab Mukherjee"
},
{
"question": "Which Indian revolutionary leader is known as 'Bagha Jatin'?",
"options": ["A. Jatindranath Mukherjee",
            "B. Jatindranath Bannerjee",
            "C. Jatindranath Das",
            "D. Jatindranath Bose"],
"answer": "A. Jatindranath Mukherjee"
},
{
"question": "Garampani Sanctuary is located in which of the following places?",
"options": ["A. Junagarh, Gujarat",
            "B. Kohima, Nagaland",
            "C. Diphu, Assam",
            "D. Gangtok, Sikkim"],
"answer": "C. Diphu, Assam"
},
{
"question": "Entomology studies what?",
"options": ["A. Behavior of human beings",
            "B. Insects",
            "C. The origin and history of technical and scientific terms",
            "D. The formation of rocks"],
"answer": "B. Insects"
},
{
"question": "Galileo was an astronomer who",
"options": ["A. Developed the telescope",
            "B. Discovered four satellites of Jupiter"

```

```
questions - Notepad
File Edit Format View Help
            "B. Discovered four satellites of Jupiter",
            "C. discovered that the movement of pendulum produces a regular time measurement",
            "D. All the above"],
"answer": "B. Discovered four satellites of Jupiter"
},
{
"question": "Who is the father of geometry?",
"options": ["A. Aristotle",
            "B. Euclid",
            "C. Pythagoras",
            "D. Kepler"],
"answer": "B. Euclid"
},
{
"question": "Indian player Jude Felix is popular for which sports?",
"options": ["A. Volleyball",
            "B. Football",
            "C. Hockey",
            "D. Tennis"],
"answer": "C. Hockey"
},
{
"question": "Who is the current chief of the world bank group?",
"options": ["A. Donald Tusk",
            "B. David Malpass",
            "C. Christine Lagarde",
            "D. Jim Yong Kim"],
"answer": "B. David Malpass"
},
{
"question": "The Government of which state has instituted the 'Tansen Samman'?",
"options": ["A. West Bengal",
            "B. Madhya Pradesh",
            "C. Bihar",
            "D. Gujarat"],
"answer": "B. Madhya Pradesh"
},
{
"question": "Who was associated with the creation of pentium chip?",
"options": ["A. Arun Netravalli",
            "B. Sabeer Bhatia",
            "C. Vinod Dham"

```

```

questions - Notepad
File Edit Format View Help
    "C. Vinod Dham",
    "D. Vijay Dham"],
    "answer": "C. Vinod Dham"
},
{
    "question": "Madhya Pradesh Chief Minister Kamal Nath has declared that Bhopal metro will be known as?",
    "options": ["A. Bhoj Metro",
        "B. Khoj Metro",
        "C. Bhopal Metro",
        "D. Auranga Metro"],
    "answer": "A. Bhoj Metro"
},
{
    "question": "Which is the first search engine of the internet?",
    "options": ["A. Yahoo",
        "B. Wais",
        "C. Archie",
        "D. Mozilla"],
    "answer": "C. Archie"
},
{
    "question": "In a Database Management System(DBMS) the content and the location of data is identified by ?",
    "options": ["A. Subdata",
        "B. Sequence Data",
        "C. Beta Data",
        "D. Meta Data"],
    "answer": "D. Meta Data"
},
{
    "question": "'.MOV' extensions refer to which kind of file?",
    "options": ["A. Image file",
        "B. Movie File",
        "C. Audio File",
        "D. ZIP File"],
    "answer": "B. Movie File"
},
{
    "question": "Who wrote the famous poem 'The Charge of the Light Brigade'?",
    "options": ["A. Lord Alfred Tennyson",
        "B. Christopher Marlowe",
        "C. Johannes Gutenberg",
        "D. Rene Descartes"]
}

```

```

questions - Notepad
File Edit Format View Help
    "D. Rene Descartes"],
    "answer": "A. Lord Alfred Tennyson"
},
{
    "question": "Who founded Indian National Army(INA)?",
    "options": ["A. Netaji Subhas Chandra Bose",
        "B. Mohan Singh",
        "C. Rash Behari Bose",
        "D. Jatridranath Mukherjee"],
    "answer": "B. Mohan Singh"
},
{
    "question": "The control of which state was handed over to british after marriage of King Charles 2 with portuguese princess in 1661?",
    "options": ["A. Cochin",
        "B. Bombay",
        "C. Surat",
        "D. Madras"],
    "answer": "B. Bombay"
},
{
    "question": "Which is the oldest football competition in India?",
    "options": ["A. Aryan Cup",
        "B. Santosh Trophy",
        "C. Durand Cup",
        "D. Federation Cup"],
    "answer": "C. Durand Cup"
},
{
    "question": "The Indian, who holds the pride of beating the computers in mathematical wizard is?",
    "options": ["A. Shakuntala Devi",
        "B. Raja Ramanna",
        "C. Ramanujam",
        "D. Rina Panigrahi"],
    "answer": "A. Shakuntala Devi"
},
{
    "question": "Guru Gopi Krishna is popular for which form of Indian dance?",
    "options": ["A. Bharatanatyam",
        "B. Kuchipudi",
        "C. Kathak",
        "D. Manipuri"],
    "answer": "B. Kuchipudi"
}
}

```

```
questions - Notepad
File Edit Format View Help
    "answer": "B. Kuchipudi"
},
{
    "question": "J.B. Dunlop is popular for which of the following inventions?",
    "options": ["A. Model airplanes",
               "B. Pneumatic rubber tire",
               "C. Rubber boot",
               "D. Automobile wheel rim"],
    "answer": "B. Pneumatic rubber tire"
}]

Ln 246, Col 18    100%    Unix (LF)    UTF-8
```

### 3. Input Screen

```
"IDLE Shell 3.9.1"
File Edit Shell Debug Options Window Help
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Rahul Sen\Desktop\MIND CRUSHER\MIND CRUSHER.py =====

=====WELCOME TO MIND CRUSHER=====
-----
1. PLAY QUIZ
2. SEE INSTRUCTIONS ON HOW TO PLAY THE GAME
3. EXIT
4. ABOUT US
ENTER YOUR CHOICE: 1|

Ln: 12 Col: 20
```

### 4. Output Screen

```
IDLE Shell 3.9.1
File Edit Shell Debug Options Window Help
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Rahul Sen\Desktop\MIND CRUSHER\MIND CRUSHER.py =====
=====WELCOME TO MIND CRUSHER=====
-----
1. PLAY QUIZ
2. SEE INSTRUCTIONS ON HOW TO PLAY THE GAME
3. EXIT
4. ABOUT US
ENTER YOUR CHOICE: 1
=====QUIZ START=====
Q1 Indian player Jude Felix is popular for which sports?
A. Volleyball
B. Football
C. Hockey
D. Tennis
Enter your answer: a
You are incorrect
Q2 The Government of which state has instituted the 'Tansen Samman'?
A. West Bengal
B. Madhya Pradesh
C. Bihar
D. Gujrat
Enter your answer: b
You are correct
Q3 Guru Gopi Krishna is popular for which form of Indian dance?
A. Bharatanatyam
B. Kuchipudi
C. Kathak
D. Manipuri
Enter your answer: c
You are incorrect
Ln: 117 Col: 0
```

```
*IDLE Shell 3.9.1*
File Edit Shell Debug Options Window Help
Q4 Who was associated with the creation of pentium chip?
A. Arun Netravalli
B. Sabeer Bhatia
C. Vinod Dham
D. Vijay Dham
Enter your answer: d
You are incorrect

Q5 At the end of March 2019, what was the amount of India's external debt?
A. US $ 540 billion
B. US $ 543 billion
C. US $ 547 billion
D. US $ 541 billion
Enter your answer: a
You are incorrect

Q6 Who is the current chief of the world bank group?
A. Donald Tusk
B. David Malpass
C. Christine Lagarde
D. Jin Yong Kim
Enter your answer: b
You are correct

Q7 Who is the father of geometry?
A. Aristotle
B. Euclid
C. Pythagoras
D. Kepler
Enter your answer: c
You are incorrect

Q8 'LIBRA' an alternative of existing cryptocurrency like bitcoin is being developed by?
A. Facebook
Ln: 117 Col: 0
```

```
*IDLE Shell 3.9.1*
File Edit Shell Debug Options Window Help
B. Google
C. Microsoft
D. None of the above
Enter your answer: d
You are incorrect

Q9 When does India celebrate Independence Day?
A. 15th August
B. 2nd October
C. 26th January
D. 4th July
Enter your answer: a
You are correct

Q10 The control of which state was handed over to british after marriage of King Charles 2 with portuguese princess in 1661?
A. Cochin
B. Bombay
C. Surat
D. Madras
Enter your answer: b
You are correct

FINAL SCORE: 4
=====WELCOME TO MIND CRUSHER=====
1. PLAY QUIZ
2. SEE INSTRUCTIONS ON HOW TO PLAY THE GAME
3. EXIT
4. ABOUT US
ENTER YOUR CHOICE:
Ln: 117 Col: 0
```



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Google

 stackoverflow

 python SOFTWARE FOUNDATION

