

```
rough > ...
1  #mood-basedmusic detector
2  #by gaurav jain 25BET10044
3  import json
4  import random
5  from datetime import datetime
6  import os
7
8  #content
9
10 music_db= {
11     "happy": [
12         "gallan goodiyan",
13         "aaj mai upar",
14         "lover-taylor swift",
15         "yellow-coldplay"
16     ],
17     "sad": [
18         "maa",
19         "agar tum sath ho-arjit singh",
20         "daylight",
21         "how soon is now-the smiths"
22     ],
23     "relax": [
24         "kabira-pritam",
25         "tumse hi-mohit chauhan",
26         "sparks-coldplay",
27         "video game-lanadel ray"
28     ],
29     "focus": [
30         "bandeya re bandeya",
31         "mast magan",
32         "sparks"
33     ],
```

```
10 music_db= {
23     relax : [
29         "focus": [
30             "bandeya re bandeya",
31             "mast magan",
32             "sparks"
33         ],
34         "energetic": [
35             "believer",
36             "thodi si daaru",
37             "sapphire",
38             "wavin flag"
39         ],
40         "old": [
41             "lag ja gale",
42             "kal chaudhvi ki raat thi"
43         ],
44         "romantic": [
45             "i wanna be yours",
46             "brooklyn baby",
47             "k",
48             "rang sharbaton ka"]
49     }
50
51 #history
52
53 history_file = "music_history.json"
54
55 def load_history():
56     if not os.path.exists(history_file):
57         return[]
58     with open(history_file, "r") as f:
59         return json.load(f)
60
```

```
with open(history_file, "r") as f:
```

```
    return json.load(f)
```

```
def save_history(entry):
```

```
    history = load_history()
```

```
    history.append(entry)
```

```
    with open(history_file, "w") as f:
```

```
        json.dump(history, f, indent=4)
```

```
#moodfinding
```

```
def calculate_mood_score():
```

```
    print("\nAnswer honestly (1 = No, 2= Yes): ")
```

```
    q1 = int(input("\nDo you feel energetic today? "))
```

```
    q2 = int(input("Do you feel calm and peaceful? "))
```

```
    q3 = int(input("Do you feel sad or low? "))
```

```
    q4 = int(input("Are you excited or happy? "))
```

```
    q5 = int(input("Do you need to focus on your tasks? "))
```

```
    q6 = int(input("Are you feeling retro? "))
```

```
    q7 = int(input("Are you feeling romantic? "))
```

```
    scores = {
```

```
        "energetic": q1 + q4,
```

```
        "relax": q2,
```

```
        "sad": q3*2,
```

```
        "happy": q4,
```

```
        "focus": q5,
```

```
        "old": q6 + q2,
```

```
        "romantic": q7+ q4
```

```
    }
```

```
#deciding mood
```

```
mood = max(scores, key=scores.get)
```

```

87     #deciding mood
88     mood = max(scores, key=scores.get)
89     return mood, scores[mood]
90
91 #generate playlist
92
93 def generate_playlist(mood,count=3):
94     songs = music_db.get(mood, [])
95     if len(songs) <=count:
96         return songs
97     return random.sample(songs, count)
98
99 #main finction
100
101 def main():
102     print("===")
103     print("MOOD MUSIC RECOMMENDER")
104     print("===")
105
106     name = input("Enter your name: ")
107     mood, score = calculate_mood_score()
108     playlist = generate_playlist(mood)
109
110     print("\n based on your mood, we detected: ")
111     print(f"--> mood: {mood.upper()} (score: {score})")
112     print("\n your generated playlist:")
113     for i, song in enumerate(playlist, 1):
114         print(f"{i}. {song}")
115
116         #save history
117     entry = {

```

```

107 mood, score = calculate_mood_score()
108 playlist = generate_playlist(mood)
109
110 print("\n based on your mood, we detected: ")
111 print(f"--> mood: {mood.upper()} (score: {score})")
112 print("\n your generated playlist:")
113 for i, song in enumerate(playlist, 1):
114     print(f"{i}. {song}")
115
116     #save history
117 entry = {
118     "name": name ,
119     "mood": mood,
120     "score": score,
121     "playlist": playlist,
122     "time": datetime.now().strftime("%Y-%m-%d %H:%M:%S")
123 }
124 save_history(entry)
125 print("\nYour playlist has been saved to history.")
126 print("Run again to build new mood patterns")
127 print("Thank you for using")
128
129 #run
130 if __name__ == "__main__":
131     main()

```



```
PS C:\Users\ASUS\.vscode\cli> & "C:\Program Files\Python314\python.exe" c:/Users/ASUS/.vscode/cli/rough
===
MOOD MUSIC RECOMMENDER
===
Enter your name: Gaurav

Answer honestly (1 = No, 2= Yes):

Do you feel energetic today? 1
Do you feel calm and peaceful? 1
Do you feel sad or low? 2
Are you excited or happy? 1
Do you need to focus on your tasks? 2
Are you feeling retro? 2
Are you feeling romantic? 1

based on your mood, we detected:
--> mood: SAD (score: 4)

your generated playlist:
1. agar tum sath ho-arjit singh
2. how soon is now-the smiths
3. maa

Your playlist has been saved to history.
Run again to build new mood patterns
Thank you for using
PS C:\Users\ASUS\.vscode\cli> █
```