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class SongNode:
    def __init__(self, title, artist):
        self.title = title
        self.artist = artist
        self.next = None

class Playlist:
    def __init__(self):
        self.head = None

    def insert_front(self, title, artist):
        new_song = SongNode(title, artist)
        new_song.next = self.head
        self.head = new_song

        print(f'Song "{title}" inserted at the front.')

    def insert_back(self, title, artist):
        new_song = SongNode(title, artist)

        if not self.head:
            self.head = new_song
        else:
            current = self.head

            while current.next:
                current = current.next

            current.next = new_song

        print(f'Song "{title}" inserted at the back.');
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    def insert_after(self, after_title, title, artist):
        current = self.head

        while current:
            if current.title == after_title:
                new_song = SongNode(title, artist)
                new_song.next = current.next
                current.next = new_song

                print(f'Song "{title}" inserted after "{after_title}".')

                return

            current = current.next

        print(f'Song "{after_title}" not found. Cannot insert "{title}".')

    def delete_front(self):
        if not self.head:
            print("Playlist is empty. Nothing to delete at front.")

            return

        removed = self.head
        self.head = self.head.next

        print(f'Song "{removed.title}" removed from front.')
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    def delete_back(self):
        if not self.head:
            print("Playlist is empty. Nothing to delete at back.")

            return

        if not self.head.next:
            removed = self.head
            self.head = None

            print(f'Song "{removed.title}" removed from back (only song).')
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        return

    current = self.head

    while current.next.next:

        current = current.next

    removed = current.next

    current.next = None

    print(f'Song "{removed.title}" removed
from back.')

def delete_middle(self, title):

    current = self.head

    prev = None

    while current:

        if current.title == title:

            if prev:

                prev.next = current.next

            else:

                self.head = current.next

            print(f'Song "{title}" removed from
playlist.')

            return

        prev = current

        current = current.next

    print(f'Song "{title}" not found in
playlist.')

found in playlist.')

def main():

    playlist = Playlist()

    while True:

        print("\n--- Playlist Menu ---")

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def display_playlist(self):

    if not self.head:

        print("Playlist is empty.")

        return

    current = self.head

    idx = 1

    print("\nPlaylist:")

    while current:

        print(f'{idx}. {current.title} -
{current.artist}')

        current = current.next

        idx += 1

    print()

def search_song(self, title):

    current = self.head

    while current:

        if current.title == title:

            print(f'Found "{title}" by
{current.artist} in the playlist.')

            return

        current = current.next

    print(f'Song "{title}" not

    print("1. Insert song at front")

    print("2. Insert song at back")

    print("3. Insert song after a song")

    print("4. Delete song from front")

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print("5. Delete song from back")
print("6. Delete a specific song by title")
print("7. Display playlist")
print("8. Search song by title")
print("9. Exit")
choice = input("Enter your choice (1-9): ")
if choice == '1':
    title = input("Enter song title: ")
    artist = input("Enter artist name: ")
    playlist.insert_front(title, artist)
elif choice == '2':
    title = input("Enter song title: ")
    artist = input("Enter artist name: ")
    playlist.insert_back(title, artist)
elif choice == '3':
    after_title = input("Enter the title of the
song to insert after: ")
    title = input("Enter new song title: ")
    artist = input("Enter artist name: ")
    playlist.insert_after(after_title, title,
artist)
elif choice == '4':
    playlist.delete_front()
elif choice == '5':
    playlist.delete_back()
elif choice == '6':
    title = input("Enter the title of the song
to delete: ")
    playlist.delete_middle(title)
elif choice == '7':
    playlist.display_playlist()
elif choice == '8':
    title = input("Enter the title of the song
to search: ")
    playlist.search_song(title)
elif choice == '9':
    print("Exiting... Goodbye!")
    break
else:
    print("Invalid choice! Please enter a
number between 1 and 9.")
if __name__ == "__main__":
    main()

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 1
Enter song title: sara sara
Enter artist name: harini
Song "sara sara" inserted at the front.

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 2
Enter song title: adiyae
Enter artist name: kanni
Song "adiyae" inserted at the back.

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 6
Enter the title of the song to delete: sow
Song "sowmiya" not found in playlist.

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 7
Playlist is empty.

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 8
Enter the title of the song to search: adi
Song "adiyae" not found in playlist.

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 3
Enter the title of the song to insert after:
Enter new song title: sowmiya
Enter artist name: meenu
Song "neeyum nanum" not found. Can't

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 4
Song "sara sara" removed from front.

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 5
Song "adiyae" removed from back (only

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--- Playlist Menu ---
1. Insert song at front
2. Insert song at back
3. Insert song after a song
4. Delete song from front
5. Delete song from back
6. Delete a specific song by title
7. Display playlist
8. Search song by title
9. Exit
Enter your choice (1-9): 9
Exiting... Goodbye!

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