8. Perform a GNU C program to generate frames from sender's message by splitting message by given frame-length.

```
#include <stdio.h>
#include <string.h>

#define MAX_MESSAGE_LENGTH 1000

void generateFrames(char *message, int frameLength) {
    int messageLength = strlen(message);
    int numFrames = (messageLength + frameLength - 1) / frameLength; // Calculate the number of frames needed
    int i, j;
    printf("Frames:\n");
```

```
 for (i = 0; i < numFrames; i++) {
        printf("Frame %d: ", i + 1);
        for (j = 0; j < frameLength && (i * frameLength + j) < messageLength; j++) {
            printf("%c", message[i * frameLength + j]);
        }
        printf("\n");
    }
}
int main() {
    char message[MAX_MESSAGE_LENGTH];
    int frameLength;

    printf("Enter the message: ");
    fgets(message, sizeof(message), stdin);
```

```
message[strcspn(message, "\n")] = '\0'; // Remove trailing newline

    printf("Enter the frame length: ");
    scanf("%d", &frameLength);

    generateFrames(message, frameLength);

    return 0;
}
```

Output

```
/tmp/aQrGJwU5hK.o
Enter the message: I am Mayank Kumar Parashar from Jaipur, Rajasthan.
Enter the frame length: 5
Frames:
Frame 1: I am
Frame 2: Mayan
Frame 3: k Kum
Frame 4: ar Pa
Frame 5: rasha
Frame 6: r fro
Frame 7: m Jai
Frame 8: pur,
Frame 9: Rajas
Frame 10: than.


=== Code Execution Successful ===
```