## **EXPERIMENT-6**

## Program:

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
struct Node {
    char url[100];
    struct Node *prev, *next;
};
struct Node *current = NULL;
void visit(char *url) {
    struct Node *newPage = (struct Node *)malloc(sizeof(struct Node));
    strcpy(newPage→url, url);
    newPage→prev = current;
    newPage → next = NULL;
    if (current) {
        // Clear forward history before linking
        struct Node *temp = current→next;
        while (temp) {
            struct Node *del = temp;
            temp = temp\rightarrownext;
            free(del);
        }
        current → next = newPage;
    }
    current = newPage;
    printf("Visited: %s\n", url);
}
void back() {
```

```
if (current & current → prev) {
        current = current → prev;
        printf("Back to: %s\n", current→url);
    } else printf("No previous page.\n");
}
void forward() {
    if (current & current → next) {
        current = current → next;
        printf("Forward to: %s\n", current→url);
    } else printf("Nothing to move forward.\n");
}
void currentPage() {
    if (current) printf("Current page: %s\n", current → url);
    else printf("No page open.\n");
}
int main() {
    int choice;
    char url[100];
    while (1) {
printf("\n1. Visit new page\n2. Back\n3. Forward\n4. Current Page\n5. Exit\nEnter choice: ");
        scanf("%d", &choice);
        switch (choice) {
            case 1: printf("Enter URL: "); scanf("%s", url); visit(url);
break;
            case 2: back(); break;
            case 3: forward(); break;
            case 4: currentPage(); break;
            case 5: exit(0);
            default: printf("Invalid choice\n");
        }
    }
    return 0;
}
```

## Output:

```
cseb2@sjcet-Veriton-S2680G:~$ cd Alwin
cseb2@sjcet-Veriton-S2680G:~/Alwin$ gcc web.c
cseb2@sjcet-Veriton-S2680G:~/Alwin$ ./a.out
1. Visit new page
2. Back
3. Forward
4. Current Page
5. Exit
Enter choice: 1
Enter URL: www.google.com
Visited: www.google.com
1. Visit new page
2. Back
3. Forward
4. Current Page
5. Exit
Enter choice: 1
Enter URL: github.com
Visited: github.com
1. Visit new page
2. Back
Forward
4. Current Page
Exit
Enter choice: 2
Back to: www.google.com
1. Visit new page
2. Back
Forward
4. Current Page
5. Exit
Enter choice: 4
Current page: www.google.com
1. Visit new page
Back
Forward
4. Current Page
5. Exit
Enter choice: 3
Forward to: github.com
1. Visit new page
Back
3. Forward
4. Current Page
5. Exit
Enter choice: 5
cseb2@sjcet-Veriton-S2680G:~/Alwin$
```