

DAY-8

Implementation of Double Linked List:

Code:

```
#include <stdio.h>

#include <stdlib.h>

struct Node {
    int data;
    struct Node *left;
    struct Node *right;
};

struct Node *head;

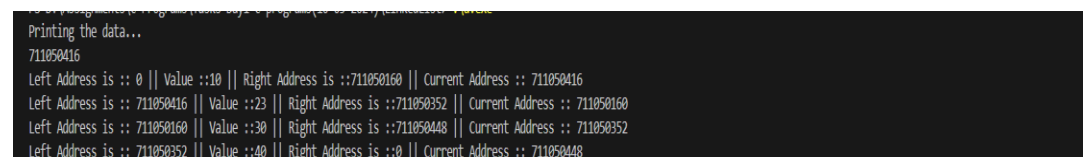
void create(int data){
    struct Node * nn=(struct Node *)malloc(sizeof(struct Node));
    struct Node *h=head;
    nn->data=data;
    nn->left=NULL;
    nn->right=NULL;
    if(h==NULL){
        head=nn;
        return ;
    }
    while(h->right!=NULL){
        h=h->right;
    }
    h->right=nn;
```

```

        nn->left=h;
    }
void display(){
    struct Node *h=head;
    printf("%u\n",h);
    while(h!=NULL){
        printf("Left Address is :: %u || Value ::%d || Right Address is ::%u ||
Current Address :: %u\n",h->left,h->data,h->right,h);
        h=h->right;
    }
}
int main(){
    create(10);
    create(23);
    create(30);
    create(40);
    printf("Printing the data...\n");
    display();
}

```

Output:



```

Printing the data...
711050416
Left Address is :: 0 || Value ::10 || Right Address is ::711050160 || Current Address :: 711050416
Left Address is :: 711050416 || Value ::23 || Right Address is ::711050352 || Current Address :: 711050160
Left Address is :: 711050160 || Value ::30 || Right Address is ::711050448 || Current Address :: 711050352
Left Address is :: 711050352 || Value ::40 || Right Address is ::0 || Current Address :: 711050448

```

2. Write a program to print the size of all data types?

Code:

```

#include <stdio.h>

#include <conio.h>

```

```
void main()
{
    printf ("No. of Bytes occupied by int is %d \n", sizeof(int));
    printf ("No. of Bytes occupied by float is %d \n", sizeof(float));
    printf ("No. of Bytes occupied by double is %d \n", sizeof(double));
    printf ("No. of Bytes occupied by char is %d \n", sizeof(char));
    getch();
}
```

Output: