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//MANOJ B E 2247222
#include <stdio.h>
#include <stdlib.h>
struct node
    int data;
    struct node *next;
};
struct node *front;
struct node *rear;
void enqueue()
    struct node *ptr;
    int item;
    ptr = (struct node *)malloc(sizeof(struct node));
    if (ptr == NULL)
        printf("overflow\n");
        return;
    else
        printf("Enter value to be inserted\n");
        scanf("%d", &item);
        ptr->data = item;
        if (front == NULL)
            front = ptr;
            rear = ptr;
            front->next = NULL;
            rear->next = NULL;
        else
            rear->next = ptr;
            rear = ptr;
            rear->next = NULL;
```

```
void dequeue()
    struct node *ptr;
    if (front == NULL)
        printf("Its an underflow \n");
        return;
    else
        ptr = front;
        front = front->next;
        free(ptr);
void display()
    struct node *ptr;
    ptr = front;
    if (front == NULL)
        printf("Queue is empty\n");
    else
        printf("Values are\n");
        while (ptr != NULL)
            printf("%d\n", ptr->data);
            ptr = ptr->next;
void main()
    int choice;
    printf("Enter 1 to perform Enqueue operation\n");
    printf("Enter 2 to perform Deqeue operation()\n");
    printf("Enter 3 to display\n");
```

```
printf("Enter 4 to exit\n");
while (1)
    printf("Enter the Choice Accordingly: ");
    scanf("%d", &choice);
    switch (choice)
    case 1:
        enqueue();
        break;
    case 2:
        dequeue();
        break;
    case 3:
        display();
        break;
    case 4:
        exit(0);
    default:
        printf("Wrong Choice\n");
```

Enter the Choice Accordingly: 1 Enter value to be inserted Enter the Choice Accordingly: 3 Values are 100 Enter the Choice Accordingly: 2 Enter the Choice Accordingly: 3 Queue is empty Enter the Choice Accordingly: 1 Enter value to be inserted 100 Enter the Choice Accordingly: 1 Enter value to be inserted Enter the Choice Accordingly: 3 Values are 100 200 Enter the Choice Accordingly: 2 Enter the Choice Accordingly: 3 Values are 200 Enter the Choice Accordingly: 4