#include <stdio.h>

#include <stdlib.h>

#define size 5

int front = -1, rear = -1;

int queue[size];

void insert()

{

int data;

printf("\nElement : ");

scanf("%d", &data);

if (rear == size - 1)

{

printf("\nOverflow\n");

return;

}

if (front == -1 && rear == -1)

{

front = 0;

rear = 0;

}

else

{

rear = rear + 1;

}

queue[rear] = data;

}

void delete()

{

int data;

if (front == -1 || front > rear)

{

printf("\nUnderflow\n");

return;

}

else

{

data = queue[front];

if (front == rear)

{

front = -1;

rear = -1;

}

else

{

front = front + 1;

}

printf("\nValue deleted ");

}

}

void display()

{

int i;

if (rear == -1)

{

printf("\nEmpty queue\n");

}

else

{

printf("[ ");

for (i = front; i <= rear; i++)

{

printf("%d ", queue[i]);

}

printf("]\n");

}

}

void main()

{

int choice;

while (choice != 4)

{

printf("\n1.Insert an element\n");

printf("2.Delete an element");

printf("\n3.Display the queue");

printf("\n4.Exit\n");

printf("\nResponse : ");

scanf("%d", &choice);

switch (choice)

{

case 1:

insert();

break;

case 2:

delete();

break;

case 3:

display();

break;

case 4:

exit(0);

break;

default:

printf("\nEnter valid choice? \n");

break;

}

}

