#include<stdio.h>

#define size 5

void enqueue(int \*array,int \*p\_a);

void dequeue(int \*array,int \*p\_a);

void peek(int \*array,int \*p\_a);

void contents(int \*array,int \*p\_a);

void main(void)

{

int array[size],a=0,\*p\_a,c;

p\_a=&a;

while(c!=5)

{

printf("\t\tThis is queue!\n\n");

printf("\t\tPrint \"1\" for enqueue\n");

printf("\t\tPrint \"2\" for dequeue\n");

printf("\t\tPrint \"3\" for peek\n");

printf("\t\tPrint \"4\" for showing contents of array\n");

printf("\t\tPrint \"5\" for exit\n");

scanf("%d",&c);

switch(c)

{

case 1:enqueue(array,p\_a);break;

case 2:dequeue(array,p\_a);break;

case 3:peek(array,p\_a);break;

case 4:contents(array,p\_a);break;

}

}

}

void enqueue(int \*array,int \*p\_a)

{

if(\*p\_a<size)

{

printf("Input entity for addition: ");

scanf("%d",&array[\*p\_a]);

\*p\_a=\*p\_a+1;

}

else

{ printf("Array is already filled\n"); }

}

void dequeue(int \*array,int \*p\_a)

{

if(\*p\_a!=0)

{

printf("Removed entity is: %d\n",array[0]);

for(int b=0;b<\*p\_a-1;b++)

{ array[b]=array[b+1]; }

\*p\_a=\*p\_a-1;

}

else

{ printf("The array is empty\n"); }

}

void peek(int \*array,int \*p\_a)

{

if(\*p\_a!=0)

{

printf("Peeked entity is: %d\n",array[0]);

}

else

{ printf("The array is empty\n"); }

}

void contents(int \*array,int \*p\_a)

{

if(\*p\_a!=0)

{

for(int d=0;d<\*p\_a;d++)

{ printf("%d",array[d]); }

printf("\n");

}

else

{ printf("The array is empty\n"); }

}