

```

#include <stdio.h>
#include <stdlib.h>
#define VMAX 12

typedef struct buffer BUFFER;

struct buffer
{
    unsigned int tab[VMAX];
    int start;
    int end;
};

int write(int a, BUFFER * b);
int read(BUFFER * b);
void init(BUFFER *b);

int main(void)
{
    BUFFER _buffer;
    int a,b,c,d;

    init(&_buffer);
    write(10, &_buffer);
    write(11, &_buffer);
    write(12, &_buffer);
    write(28, &_buffer);

    a=read(&_buffer);
    b=read(&_buffer);
    c=read(&_buffer);
    d=read(&_buffer);

    printf("premiere valeur memorisee : %d, deuxieme : %d, troisieme : %d, quatrieme : %d\n",a,b,c,d);

    system("PAUSE");
    return 0;
}

void init(BUFFER *b)
{
    b->start=0;
    b->end=0;
}

int write(int a, BUFFER *b)
{
    if(b->start != (b->start+1)%10)

```

```
{  
b->tab[b->end]=a;  
b->end=(b->end+1)%10;  
return 0;  
}  
return -1;  
}
```

```
int read(BUFFER *b)  
{  
int retour;  
if(b->start != b->end)  
{  
retour=b->tab[b->start];  
b->start=(b->start+1)%10;  
return retour;  
}  
return -1;  
}
```