

<b>Problema 1</b>	8 (4,4) ptos	
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a)

```
function c = XOR(a,b)

if a
    if b
        c = 0;
    else
        c = 1;
    end
elseif b
    c = 1;
else
    c = 0;
end
```

b)

```
function R = XOR_matriz(M,N)

[m,n]=size(M);
R=ones(m,n);
for i=1:m
    for j=1:n
        R(i,j)=XOR(M(i,j),N(i,j));
    end
end
```

<b>Problema 2</b>	10 (5, 5) ptos	
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a)

```
function r = suma_numeros(s)
r=0;
for i=1:s
    r=r+i^2;
end
```

b)

```
function r = menor_numero(s)
r=0;
sum=0;

while sum < s
    r=r+1;
    sum=sum+r;
end
```

<b>Problema 3</b>	11 (2,2,2,5) ptos	
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a) 100011

b) 47

c) 100100011

d)

```
function r = equivalente(b,V)
r=0;
n=length(V);
for i=1:n
    r=r+V(i)* b^(n-i);
end
```

<b>Problema 4</b>	11 (5,6) ptos	
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a)

```
function r = MediaMovil(V,i,k)
r=0;
for j=i:i+k
    r = r + V(j);
end
r=r/(k+1);
```

b)

```
function R = MediaMovilVec(V,k)
n=length(V);
R=ones(1,n-k);
for i=1:n-k
    R(i)=MediaMovil(V,i,k);
end
```