

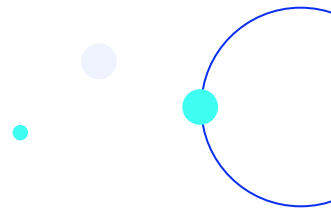
# Criptografía y Blockchain

Módulo 4 - Resolución del laboratorio

## Resolución del ejercicio

1 y 2.

```
"dificultad" : 4
"merkle_root" :
"e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca495991b7852b855"
"nonce" : "0x196b75"
"hash previo" :
"0x0000000000000000000000000000000000000000000000000000000000000000"
"timestamp" : "02/10/23-16:01:36"
"coinbase" : "1000 --> Satoshi Nakamoto"
```



Validar Blockchain

Ultimo bloque

```
{
  "header": {
    "indice": 1
    "peso": 0
    "dificultad": 4
    "merkle_root":
    "e3b0c44298fc1c149afb4c8996fb92427ae41e4649b934ca49599
    "nonce": "0x196b75"
    "hash previo":
    "0x0000000000000000000000000000000000000000000000000000000000000000
    "timestamp": "02/10/23-16:01:36"
    "coinbase": "1000 --> Satoshi Nakamoto"
  }
  "body": {
    "transacciones": []
  }
}
```

4.

Nueva transacción

Remitente

{'Satoshi Nakamoto': '7197a39efcc4f571fc843c20db23c06...'}

Destinatario

{'Albert Einstein': 'c07568337dbe3e57daa23f88ff8a9d789...'}

Monto

500

Agregar transacción

5.

```

Ultimo bloque
{
  "header": {
    "indice": 2
    "peso": 2
    "dificultad": 4
    "merkle_root":
    "4720a6628343f6037ffb287ffa35c0212675d5d51f4b2593737a
    "nonce": 41085
    "hash previo":
    "bab8e804aa667ab97e092afd5a1f2574f542f10208251baafb7
    "timestamp": "02/10/23-16:13:25"
    "coinbase": "1000 --> Satoshi Nakamoto"
  }
  "body": {
    "transacciones": [
      0: {
        "remitente":
        "7197a39efcc4f571fc843c20db23c06829eb587463007c
        "destinatario":
        "c07568337dbe3e57daa23f88ff8a9d789b319f5b846011
        "monto": 500
        "info":
        "Satoshi Nakamoto --> Albert Einstein"
      }
    ]
  }
}

```

7.

## Blockchain

Blockchain

```
{
  "blockchain": [...],
  "longitud": 3
}
```

8.

```
2: {
  "header": {...}
  "body": {
    "transacciones": [
      0: {
        "remitente": "7197a39efcc4f571fc843c20db23c06829eb587463007dda4739a43e6eee5933"
        "destinatario": "e6e61e004af9565830b4134f884d688bf5456ce96b1de0546707acabe35d1a1a"
        "monto": 120
        "info": "Satoshi Nakamoto --> Werner Heisenberg"
      }
      1: {
        "remitente": 0
        "destinatario": "5e9b87a1e527484c84d061cbc6bdf55"
        "monto": 1
        "info": "Recompensa por minado"
      }
    ]
  }
}
"longitud": 3
```

**¡Sigamos  
trabajando!**