

Bitcoin Scripting Assignment Report

Team Name: **Trinity**

Members:

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-

Bitcoin Core Configuration

The following configuration is used in the **bitcoin.conf** file:

```
regtest=1
server=1
rpcuser=user
rpcpassword=password
rpcallowip=127.0.0.1
rpcport=18443
fallbackfee=0.0002
mintxfee=0.00001
paytxfee=0.0001
txconfirmtarget=1
maxtxfee=0.01
```

Part 1: Legacy Transactions (P2PKH)

Wallet Setup

- **Wallet Name:** legacy_wallet
- Checked if wallet exists and loaded or created new wallet if not found.

Address Generation

- **Address A:** mjBos7kiFRcSpaj7GYFXLBsjUN4VuUDBNr
- **Address B:** mt8VThhdpseQG9V8dr8ot7LS3XoQhZFDNo
- **Address C:** mhGEdtQCaiXMV5dw2TGhT9fSGgBRwRGvZZ

Funding Address A

- Generated 101 blocks to **Address A** to obtain spendable balance.
- Sent 10 BTC to **Address A** for further transactions.

Fund Transaction ID:

Fund TxID: e8cf50c9ecaf7489fc3953130a4931be3c446345595b60e56d341cefc32d3ea9

Listing UTXO for Address A

- Listed available UTXOs.

UTXO for A:

```
UTXO for A: {'txid': 'c004a4249b5c6d71d6e318fd4fbd003417f2c98ea567649415d22194ff9ef4d1', 'vout': 0, 'address': 'mjBos7kiFRcSpaj7GYFXLBsjUN4VuUDBNr', 'label': '', 'scriptPubKey': '76a9142841901a16e96858c5499933c74d1b73c31bd3a288ac', 'amount': Decimal('0.00152587'), 'confirmations': 101, 'spendable': True, 'solvable': True, 'desc': 'pkh([78c8108c/44h/1h/0h/0/60]022771e6484bc71d7be532393a022df24cebb5b357f6bafebecd3973feff5bba60)#68xjdfk4', 'parent_descs': ['pkh(tpubD6NzVbkryhZ4XM4M84qWMeKFnZDAJ4H1AD5Pr7SHk1CT6LA7aVv3N8z4X4ezUrygouX1xHDMQk13vGaVzzDV8EaRh91YGDah8UropwVG1k8/44h/1h/0h/0/*)#pmlr9qny'], 'safe': True}
```

Transaction: A -> B

- Constructed transaction from **Address A** to **Address B**.
- Fee: 0.0002 BTC
- Signed and broadcasted transaction.

Transaction A -> B TxID:

Transaction A -> B TxID: 71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7

Decoded Transaction A -> B:

```
PS X:\Blockchain\assignment2> python -u "x:\Blockchain\assignment2\p1.py"
wallet 'legacy_wallet' already loaded.
Address A: mjb8os7kiFrcSpaj7GYfXLBsjUN4WUUD8Mr, Address B: mt8VThdpseQG9V8dr8ot7LS3XoQhZFDNo, Address C: mhGedtQCaIXpN5dwZTGht9fSgB8Rw6vZZ
Fund TXID: e8cf59c9ecaf7489fc3953130a4931be3c446345595b60e56d341cefc32d3ea9
UTXO for A: {"txid": "c004a4249b5c6d71d6e318fd4fbd003417f2c98ea567649415d22194ff9ef4d1", "vout": 0, "address": "mjb8os7kiFrcSpaj7GYfXLBsjUN4WUUD8Mr", "label": "", "scriptPubKey": "76a9142841901a16e96858c5499933c74d1b73c31bd3a288ac", "amount": Decimal('0.00152587'), "confirmations": 101, "spendable": True, "solvable": True, "desc": "pkh([78c8108c/44h/1h/0h/0/60]022771e6484bc71d7be532393a022df24ceb5b357f6bafebecd3973feff5bba60)#68xjdfk4", "parent_descs": ["pkh(tpub60NzVbkrYhZ4X94M84qWekFmZDAJ4H1A05Pr7SH4k1CT6LA7aV3N8z4X4ezUrygouX1x4DmQk13VgaVzzDV8EaRh91YGdAh8JrcpwG1k8/44h/1h/0h/0/*)#pmlr9gny"], "safe": True}
Transaction A -> B TXID: 71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7
Decoded Transaction A -> B:
{
  "txid": "71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7",
  "hash": "71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7",
  "version": 2,
  "size": 191,
  "vsize": 191,
  "weight": 764,
  "locktime": 0,
  "vin": [
    {
      "txid": "c004a4249b5c6d71d6e318fd4fbd003417f2c98ea567649415d22194ff9ef4d1",
      "vout": 0,
      "scriptSig": {
        "asm": "30440220587eb0e92a84cba314bbc015f2bd6fe1f68cd5be1ec9a1d8cbff4df44921ec46022068ff91db0c033b65f5110ab22ee533593f7f636a69665dc76ac520efdfb5525[ALL] 022771e6484bc71d7be532393a022df24ceb5b357f6bafebecd3973feff5bba60",
        "hex": "7430440220587eb0e92a84cba314bbc015f2bd6fe1f68cd5be1ec9a1d8cbff4df44921ec46022068ff91db0c033b65f5110ab22ee533593f7f636a69665dc76ac520efdfb552502102771e6484bc71d7be532393a022df24ceb5b357f6bafebecd3973feff5bba60"
      },
      "sequence": 4294967293
    }
  ],
  "vout": [
    {
      "value": "0.00132587",
      "n": 0,
      "scriptPubKey": {
        "asm": "OP_DUP OP_HASH160 8a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b OP_EQUALVERIFY OP_CHECKSIG",
        "desc": "addr(mt8VThdpseQG9V8dr8ot7LS3XoQhZFDNo)#5hcn4mx9",
        "hex": "76a9148a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b88ac",
        "address": "mt8VThdpseQG9V8dr8ot7LS3XoQhZFDNo",
        "type": "pubkeyhash"
      }
    }
  ]
}
```

```
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$ btcdeb -v '76a9148a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b88ac'
btcdeb 5.0.24 -- type 'btcdeb -h' for start up options
LOG: signing segwit taproot
notice: btcdeb has gotten quieter; use --verbose if necessary (this message is temporary)
valid script
5 op script loaded. type 'help' for usage information
script                                     | stack
-----+-----
OP_DUP                                     |
OP_HASH160                                |
8a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b |
OP_EQUALVERIFY                             |
OP_CHECKSIG                                |
#0000 OP_DUP                               |
btcdeb> ^C
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$
```

```
PS C:\Users\DK YADAV> bitcoin-cli -regtest decodescript 76a9148a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b88ac
{
  "asm": "OP_DUP OP_HASH160 8a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b OP_EQUALVERIFY OP_CHECKSIG",
  "desc": "addr(mt8VThdpseQG9V8dr8ot7LS3XoQhZFDNo)#5hcn4mx9",
  "address": "mt8VThdpseQG9V8dr8ot7LS3XoQhZFDNo",
  "type": "pubkeyhash",
  "p2sh": "2MueUEzuwcZZfE3EvoRsc8Uxb8CsyTWDWaP",
  "segwit": {
    "asm": "0 8a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b",
    "desc": "addr(bcrt1q3fdpt8f4jnlm8lelx2e0lgn3e0zf9tzmzjt6ct)#eradv08",
    "hex": "00148a5a159d3594ffb3ff3f32b2ffa271cbc492ac3b",
    "address": "bcrt1q3fdpt8f4jnlm8lelx2e0lgn3e0zf9tzmzjt6ct",
    "type": "witness_v0_keyhash",
    "p2sh-segwit": "2N1HRzPH71ddbAgS2FYDH8PThA3URRwnr4K"
  }
}
PS C:\Users\DK YADAV> | lets = rpc_connection.listwallets()
```

Listing UTXO for Address B

- Listed UTXO for **Address B** after receiving funds.

UTXO for B:

```
UTXO for B: {'txid': '71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7', 'vout': 0, 'address': 'mt8VT  
hhdhpseQG9V8dr8ot7LS3XoQhZFDNo', 'label': '', 'scriptPubKey': '76a9148a5a159d35h([78c8108c/44h/1h/0h/0/61]03f198ae6c0d  
64ca4ef87d810d03ab720e0f82de05e8b279208e3913057658e7b5)#zz3u50d1', 'parent_descs': ['pkh(tpubD6NzVbkrYhZ4X4M84qWMeKF  
nZDAJ4H1AD5Pr7SHk1CT6LA7aVv3N8z4X4ezUrygouX1xHDMQk13vGaVzzDV8EaRh91YGDah8UropwVG1k8/44h/1h/0h/0/*)#pm1r9qny'], 'safe'  
: True}
```

Transaction: B -> C

- Constructed transaction from **Address B** to **Address C**.
- Fee: **0.0002 BTC**
- Signed and broadcasted transaction.

Transaction B -> C TxID:

```
Transaction B -> C TxID: 610a8944a39cabfc21f508f7c74e7da8b9bf6c02842ad045eb48d3d8c6098e14
```

Decoded Transaction B -> C

```
}  
]  
}  
UTXO for B: {'txid': '71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7', 'vout': 0, 'address': 'mt8VT  
hhdhpseQG9V8dr8ot7LS3XoQhZFDNo', 'label': '', 'scriptPubKey': '76a9148a5a159d35  
h([78c8108c/44h/1h/0h/0/61]03f198ae6c0d64ca4ef87d810d03ab720e0f82de05e8b279208e3913057658e7b5)#zz3u50d1', 'parent_descs': ['pkh(tpubD6NzVbkrYhZ4X4M84qWMeKF  
nZDAJ4H1AD5Pr7SHk1CT6LA7aVv3N8z4X4ezUrygouX1xHDMQk13vGaVzzDV8EaRh91YGDah8UropwVG1k8/44h/1h/0h/0/*)#pm1r9qny'], 'safe': True}  
Transaction B -> C TxID: 610a8944a39cabfc21f508f7c74e7da8b9bf6c02842ad045eb48d3d8c6098e14  
Decoded Transaction B -> C:  
{  
  "txid": "610a8944a39cabfc21f508f7c74e7da8b9bf6c02842ad045eb48d3d8c6098e14",  
  "hash": "610a8944a39cabfc21f508f7c74e7da8b9bf6c02842ad045eb48d3d8c6098e14",  
  "version": 2,  
  "size": 191,  
  "vsize": 191,  
  "weight": 764,  
  "locktime": 0,  
  "vin": [  
    {  
      "txid": "71202879880856d5a0b64db094ef0c4b3640f0e1f557a245a3db646f846240b7",  
      "vout": 0,  
      "scriptSig": {  
        "asm": "304402201583c47cdebcecccc8acca03bb132960d7dc086d77726204e969b0ac84e5e3802201b21c0fe43d014a927d9217b51593b9ad3560ace6a52153d445edf7e108ff918[ALL] 03f198ae6c0d64ca4ef87d810  
d03ab720e0f82de05eb279208e3913057658e7b5",  
        "hex": "47304402201583c47cdebcecccc8acca03bb132960d7dc086d77726204e969b0ac84e5e3802201b21c0fe43d014a927d9217b51593b9ad3560ace6a52153d445edf7e108ff918012103f198ae6c0d64ca4ef87d810  
d03ab720e0f82de05eb279208e3913057658e7b5"  
      },  
      "sequence": 4294967293  
    },  
  ],  
  "vout": [  
    {  
      "value": "0.00112587",  
      "n": 0,  
      "scriptPubKey": {  
        "asm": "OP_DUP OP_HASH160 1327a759ae90e8edb9c37de533a71e66b929d5b6 OP_EQUALVERIFY OP_CHECKSIG",  
        "desc": "addr(mhGedtQcAiXNV5dw2tGh19fSGgBRwGvZZ)H97326u0j",  
        "hex": "76a9141327a759ae90e8edb9c37de533a71e66b929d5b688ac",  
        "address": "mhGedtQcAiXNV5dw2tGh19fSGgBRwGvZZ",  
        "type": "pubkeyhash"  
      }  
    }  
  ]  
}
```

```

guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$ btcdeb -v '76a9141327a759ae90e8edb9c37de533a71e66b929d5b688ac'
btcdeb 5.0.24 -- type 'btcdeb -h' for start up options
LOG: signing segwit taproot
notice: btcdeb has gotten quieter; use --verbose if necessary (this message is temporary)
valid script
5 op script loaded. type 'help' for usage information
script                                     | stack
-----+-----
OP_DUP                                     |
OP_HASH160                               |
1327a759ae90e8edb9c37de533a71e66b929d5b6 |
OP_EQUALVERIFY                           |
OP_CHECKSIG                               |
#0000 OP_DUP                             |
btcdeb> ^C
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$

```

```

PS C:\Users\DK YADAV> bitcoin-cli _regtest decodescript 76a9141327a759ae90e8edb9c37de533a71e66b929d5b688ac
{
  "asm": "OP_DUP OP_HASH160 1327a759ae90e8edb9c37de533a71e66b929d5b6 OP_EQUALVERIFY OP_CHECKSIG",
  "desc": "addr(mhGEdtQCaiXMV5dw2TGhT9fSGgBRwRGvZZ)#97326u0j",
  "address": "mhGEdtQCaiXMV5dw2TGhT9fSGgBRwRGvZZ",
  "type": "pubkeyhash",
  "p2sh": "2N1FeA6Dn4ypmqNKz2ba8WTWm7VuhhfQ4UV",
  "segwit": {
    "asm": "0 1327a759ae90e8edb9c37de533a71e66b929d5b6",
    "desc": "addr(bcrt1qzvn6wkdwjr5wmwwr0hjn8fc7v6ujn4dkughh9n)#88vuczyt",
    "hex": "00141327a759ae90e8edb9c37de533a71e66b929d5b6",
    "address": "bcrt1qzvn6wkdwjr5wmwwr0hjn8fc7v6ujn4dkughh9n",
    "type": "witness_v0_keyhash",
    "p2sh-segwit": "2Mwf5SAtkL45VPYukbTAZe757TJkQkT8aEh"
  }
}
PS C:\Users\DK YADAV>

```

Part 2: SegWit Transactions (P2SH-P2WPKH)

Wallet Setup

- **Wallet Name:** `segwit_wallet`
- Checked if wallet exists and loaded or created new wallet if not found.

Address Generation

- **Address A':** 2NDkL11L1597ZA41B99Y4WhFF3xo3mPmHT9
- **Address B':** 2MyqDM56gWutHqfiddUGXtPLpNeSQ5CHypp
- **Address C':** 2N7CHZmFDLfbe99BZwBXWKSa5PssG5jhngP

Funding Address A'

- Generated 101 blocks to **Address A'** to obtain spendable balance.
- Sent 10 BTC to **Address A'** for further transactions.

Fund Transaction ID:

Fund TxID: 3dde804de7a36884c6536fef5b9165c3fa6064ca0ec6b47c52fab66a0932981a

Listing UTXO for Address A'

- Listed available UTXOs.

UTXO for A':

```
UTXO for A': {'txid': '3dde804de7a36884c6536fef5b9165c3fa6064ca0ec6b47c52fab66a0932981a', 'vout': 0, 'address': '2N9Q5qXhdaFGEZRH2UStf9W4hRwLeT1VHA8', 'redeemScript': '00148535d3aa32ab25b5b8160666431a910e348932e7', 'scriptPubKey': 'a914b12ef3bfbfd4ad4c65f7b5554f6c428423ad357f87', 'amount': Decimal('5.77083245'), 'confirmations': 1, 'spendable': True, 'solvable': True, 'desc': 'sh(wpkh([37be8891/49h/1h/0h/1/1]02102cd7f6e347e491d45e3a757fd60aeaff1c6ea72b8673a6aee15eb5d123f96))#c0s63h0u', 'parent_descs': ['sh(wpkh(tpubD6NzVbkrYhZ4YjZG6DxuTGTLD5J74RdYKkybXX6ywtGwJ9Uoz2jpv28pS43xnth9ARsWSyArQvXVyjF57HG7um1u5wNVU5WbD1dhnCv3hpF/49h/1h/0h/1/*))#p62p0hja'], 'safe': True}
```

Transaction: A' -> B'

- Constructed transaction from **Address A'** to **Address B'**.
- Fee: **0.0002 BTC**
- Signed and broadcasted transaction.

Transaction A' -> B' TxID:

Transaction A' -> B' TxID: a8c47d8372dc119e22e2682382f037e6a31a86ecfa39b3fcd88af39c27b377ed

Decoded Transaction A' -> B':

```
PS X:\Blockchain\assignment2> python -u "x:\Blockchain\assignment2\p2.py"
Address A': 2NDK1L1L1597ZA41B99V4MHf3xo3mPmH19, Address B': 2HyqDMS6gWuthqFiddUGXtPLpieSQ5Chypp, Address C': 2N7CHZmFDLfbE998Zw8XWKSa5PssG5jhngP
Fund TxID: 3dde804de7a36884c6536fef5b9165c3fa6064ca0ec6b47c52fab66a0932981a
UTXO for A': {'txid': '3dde804de7a36884c6536fef5b9165c3fa6064ca0ec6b47c52fab66a0932981a', 'vout': 0, 'address': '2N9Q5qXhdaFGEZRH2UStf9W4hRwLeT1VHA8', 'redeemScript': '00148535d3aa32ab25b5b8160666431a910e348932e7', 'scriptPubKey': 'a914b12ef3bfbfd4ad4c65f7b5554f6c428423ad357f87', 'amount': Decimal('5.77083245'), 'confirmations': 1, 'spendable': True, 'solvable': True, 'desc': 'sh(wpkh([37be8891/49h/1h/0h/1/1]02102cd7f6e347e491d45e3a757fd60aeaff1c6ea72b8673a6aee15eb5d123f96))#c0s63h0u', 'parent_descs': ['sh(wpkh(tpubD6NzVbkrYhZ4YjZG6DxuTGTLD5J74RdYKkybXX6ywtGwJ9Uoz2jpv28pS43xnth9ARsWSyArQvXVyjF57HG7um1u5wNVU5WbD1dhnCv3hpF/49h/1h/0h/1/*))#p62p0hja'], 'safe': True}
Transaction A' -> B' TxID: a8c47d8372dc119e22e2682382f037e6a31a86ecfa39b3fcd88af39c27b377ed
Decoded Transaction A' -> B':
{
  "txid": "a8c47d8372dc119e22e2682382f037e6a31a86ecfa39b3fcd88af39c27b377ed",
  "hash": "e6a669bc858167da58c986a26d4c60eb640d1aa8c1964c4f3a76097d5e286874",
  "version": 2,
  "size": 215,
  "vsize": 134,
  "weight": 533,
  "locktime": 0,
  "vin": [
    {
      "txid": "3dde804de7a36884c6536fef5b9165c3fa6064ca0ec6b47c52fab66a0932981a",
      "vout": 0,
      "scriptSig": {
        "asm": "00148535d3aa32ab25b5b8160666431a910e348932e7",
        "hex": "1600148535d3aa32ab25b5b8160666431a910e348932e7"
      },
      "txinwitness": [
        "304402207bee152083a8439c6d7e04c5de5297fdf36965673b6ad2796d9c7d6cd88fb960220613c8e30df3c3c9ff7883c2b91fe1e97a25f8098ed8f7748d67abd6e3fb6870201",
        "02102cd7f6e347e491d45e3a757fd60aeaff1c6ea72b8673a6aee15eb5d123f96"
      ],
      "sequence": 4294967293
    }
  ],
  "vout": [
    {
      "value": "5.77063245",
      "n": 0,
      "scriptPubKey": {
        "asm": "OP_HASH160 483e5ca0b81b0afe567d65ba8ab3246eb4241f6 OP_EQUAL",
        "desc": "addr(2HyqDMS6gWuthqFiddUGXtPLpieSQ5Chypp)#tmwq9cy",
        "hex": "a91483e5ca0b81b0afe567d65ba8ab3246eb4241f687",
        "address": "2HyqDMS6gWuthqFiddUGXtPLpieSQ5Chypp",
        "type": "scripthash"
      }
    }
  ]
}
```

```
#0000 OP_DUP
btcdeb> ^C
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$ btcdeb -v 'a914483e5ca0b81b0afe6567d65ba8ab3246eb4241f687'
btcdeb 5.0.24 -- type 'btcdeb -h' for start up options
LOG: signing segwit taproot
notice: btcdeb has gotten quieter; use --verbose if necessary (this message is temporary)
valid script
3 op script loaded. type 'help' for usage information
script | stack
-----+-----
OP_HASH160 |
483e5ca0b81b0afe6567d65ba8ab3246eb4241f6 |
OP_EQUAL |
#0000 OP_HASH160
btcdeb> ^C
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$
```

```
PS C:\Users\DK YADAV> bitcoin-cli -regtest decodescript a914483e5ca0b81b0afe6567d65ba8ab3246eb4241f687
{
  "asm": "OP_HASH160 483e5ca0b81b0afe6567d65ba8ab3246eb4241f6 OP_EQUAL",
  "desc": "addr(2MyqDM56gWutHqfiddUGXtPLpNeSQ5CHypp)#tmwqq9cy",
  "address": "2MyqDM56gWutHqfiddUGXtPLpNeSQ5CHypp",
  "type": "scripthash",
  "address": "Address A: {addr_A}, Address B: {addr_B}, Address C: {addr_C}"
}
PS C:\Users\DK YADAV>
```

Listing UTXO for Address B'

- Listed UTXO for **Address B'** after receiving funds.

UTXO for B':

```
UTXO for B': {'txid': 'a8c47d8372dc119e22e2682382f037e6a31a86ecfa39b3fcd88af39c27b377ed', 'vout': 0, 'address': '2MyqDM56gWutHqfiddUGXtPLpNeSQ5CHypp', 'label': '', 'redeemScript': '00143ec13184f90eb5b50db2e7c93ca619a1bf4e9bd6', 'scriptPubKey': 'a914483e5ca0b81b0afe6567d65ba8ab3246eb4241f687', 'amount': Decimal('5.77063245'), 'confirmations': 1, 'spendable': True, 'solvable': True, 'desc': 'sh(wpkh([37be8891/49h/1h/0h/0/7]0293e13075990b27a66ef03ce405d482f6e682ddb36cf66fd041a681d6d91b34c6))#apx6w40m', 'parent_descs': ['sh(wpkh(tpubD6NzVbkryhZ4YjZGoDxuTGtLD5J74RdyKKybXX6ywtGwJ9Uoz2jpv28pS43xnth9ARsWSYarQvXVyjF57HG7um1u5wNvU5WBd1dhnCv3hpF/49h/1h/0h/0/*))#8ezy56ef'], 'safe': True}
```

Transaction: B' -> C'

- Constructed transaction from **Address B'** to **Address C'**.
- Fee: **0.0002 BTC**
- Signed and broadcasted transaction.

Transaction B' -> C' TxID:

```
Transaction B' -> C' TxID: e50119c9e3381c4617b99db34397fbcf40c4868eeba95461a5781c8cd531651e
```

Decoded Transaction B' -> C':

```
}
UTXO for B': {'txid': 'a8c47d8372dc119e22e2682382f037e6a31a86ecfa39b3fcd88af39c27b377ed', 'vout': 0, 'address': '2HyqD56gauthhgfiddUGXTPtPwS05Chypp', 'label': '', 'redeemScript': '00143ec13184f9
9eb5b50db2e7c93ca619a1bf4e9bd6', 'scriptPubKey': 'a914483e5ca0b81b0afe567d65baab3246eb4241f687', 'amount': Decimal('5.77063245'), 'confirmations': 1, 'spendable': True, 'solvable': True, 'desc'
: 'sh(wpkh([37be8891/49h/1h/0h/0/7]0293e13075990b27a66ef03ce405d482f6e682ddb36cf6fd9a1a681d6d91b34c6))#apx6w40m', 'parent_descs': ['sh(wpkh(tpubD6tztVbkrYhZ4Yj2G6DxutGTLD5J74RdYKkybXX6yhtGwD9Uoz2
jpv28pS43mth9ARshSYarQVxyjF57HG7umU5wNMU5MBd1dhncv3hpf/49h/1h/0h/0/*))#8ezy56ef'], 'safe': True}
Transaction B' -> C' Txid: e50119c9e3381c4617b99db34397fbcf40c4868eeba95461a5781c8cd531651e
Decoded Transaction B' -> C':
{
  "txid": "e50119c9e3381c4617b99db34397fbcf40c4868eeba95461a5781c8cd531651e",
  "hash": "b4928dd8e041a0693ae21dad428efc2b06c46d71447143ed149630cf9e9e0e64",
  "version": 2,
  "size": 215,
  "vsize": 134,
  "weight": 533,
  "locktime": 0,
  "vin": [
    {
      "txid": "a8c47d8372dc119e22e2682382f037e6a31a86ecfa39b3fcd88af39c27b377ed",
      "vout": 0,
      "scriptSig": {
        "asm": "00143ec13184f90eb5b50db2e7c93ca619a1bf4e9bd6",
        "hex": "1600143ec13184f90eb5b50db2e7c93ca619a1bf4e9bd6"
      },
      "txinwitness": [
        "304402205ed0426910f16096979046d2a69637afe446961aa2d627f8f040f1966d6cc5f3022011b9c1644df21f7409f18a3d0e749d6ad3d731d6f2cbb589075b17e2fcc7a201",
        "0293e13075990b27a66ef03ce405d482f6e682ddb36cf6fd9a1a681d6d91b34c6"
      ],
      "sequence": 4294967293
    }
  ],
  "vout": [
    {
      "value": "5.77063245",
      "n": 0,
      "scriptPubKey": {
        "asm": "OP_HASH160 99037fcc7e3feffbe4e8aa08fd98310d3871775c OP_EQUAL",
        "desc": "addr(2N7CHZmFDLfbe99BZwBXWKSa5PssG5jhngP)#ywnqwqlq",
        "hex": "a91499037fcc7e3feffbe4e8aa08fd98310d3871775c87",
        "address": "2N7CHZmFDLfbe99BZwBXWKSa5PssG5jhngP",
        "type": "scripthash"
      }
    }
  ]
}
```

```
#0000 OP_HASH160
btcdeb> ^C
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$ btcdeb -v 'a91499037fcc7e3feffbe4e8aa08fd98310d3871775c87'
btcdeb 5.0.24 -- type 'btcdeb -h' for start up options
LOG: signing segwit taproot
notice: btcdeb has gotten quieter; use --verbose if necessary (this message is temporary)
valid script
3 op script loaded. type 'help' for usage information
script | stack
-----+-----
OP_HASH160 |
99037fcc7e3feffbe4e8aa08fd98310d3871775c |
OP_EQUAL |
#0000 OP_HASH160
btcdeb> ^C
guest@dr-HP-Z2-Tower-G9-Workstation-Desktop-PC:~$
```

```
PS C:\Users\DK YADAV> bitcoin-cli -regtest decodescript a91499037fcc7e3feffbe4e8aa08fd98310d3871775c87
{
  "asm": "OP_HASH160 99037fcc7e3feffbe4e8aa08fd98310d3871775c OP_EQUAL",
  "desc": "addr(2N7CHZmFDLfbe99BZwBXWKSa5PssG5jhngP)#ywnqwqlq",
  "address": "2N7CHZmFDLfbe99BZwBXWKSa5PssG5jhngP",
  "type": "scripthash"
}
PS C:\Users\DK YADAV> bitcoin-cli -regtest generatetoaddress(101, addr_A)
```

Notes

- Fee for each transaction: **0.0002 BTC**.
- Blocks generated after each transaction to confirm.