

The screenshot shows the Remix Ethereum IDE interface. The left sidebar contains the Solidity Compiler settings, which are set to version 0.8.19+commit.7dd6d404. The main workspace displays the Solidity code for a contract named Randomness. The code defines a struct Request with fields seed, blockNumber, and requester. It also includes event definitions for RandomRequested and RandomGenerated, and a function requestRandom that increments a requestCount and adds a new Request to a mapping.

```
// SPDX-License-Identifier: MIT
pragma StructDefinition;
contract Randomness {
    uint256 seed;
    uint256 blockNumber;
    address requester;
}

uint256 public requestCount;
mapping(uint256 => Request) public requests;

event RandomRequested(uint256 requestId, address requester, uint256 seed);
event RandomGenerated(uint256 requestId, uint256 random);

function requestRandom(uint256 _seed) public returns (uint256) {
    infinite gas
    requestCount++;

    requests[requestCount] = Request({
        seed: _seed,
        blockNumber: blockNumber(),
        requester: msg.sender
    });
}
```

The screenshot shows the Remix Ethereum IDE interface. On the left, the Solidity Compiler sidebar is visible, showing the compiler version as 0.8.19+commit.7dd6d404, with checkboxes for "Auto compile" and "Hide warnings". Below it are buttons for "Compile Randomness.sol", "Compile and Run script", "Run Remix Analysis", and "Run SolidityScan". The main workspace displays a Solidity contract named "Randomness.sol". The code implements a function to generate randomness based on the current block's timestamp and hash, along with a function to track request counts and emit events.

```
21 requests[requestCount] = Request({
22     seed: _seed,
23     blockNumber: block.number,
24     requester: msg.sender
25 });
26
27 emit RandomRequested(requestCount, msg.sender, _seed);
28 return requestCount;
29 }
30
31 function generateRandom(uint256 requestId) public returns (uint256) {
32     Request memory req = requests[requestId];
33     require(req.blockNumber < block.number, "Wait for next block");
34
35     uint256 random = uint256(
36         Keccak256(
37             abi.encodePacked(
38                 req.seed,
39                 blockhash(req.blockNumber),
40                 blockhash(req.blockNumber + 1),
41                 block.timestamp,
42             )
43         )
44     );
45 }
```

The screenshot shows the Remix Ethereum IDE interface. On the left, there's a sidebar with various icons for deployment, transactions, accounts, and contracts. The main area displays a Solidity code editor for a file named `Randomness.sol`. The code is as follows:

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.19;

contract Randomness {
    struct Request {
        uint256 seed;
        uint256 blockNumber;
        address requester;
    }

    uint256 public requestCount;
    mapping(uint256 => Request) public requests;

    event RandomRequested(uint256 requestId, address requester, uint256 seed);
    event RandomGenerated(uint256 requestId, uint256 random);

    function requestRandom(uint256 _seed) public returns (uint256) {
        infinite gas
        requestCount++;

        requests[requestCount] = Request({
            seed: _seed,
            ...
        });
    }
}
```

The environment settings on the left indicate "Remix VM (London)" as the VM type, a gas limit of 5,000,000, and 0 Wei as the value. The bottom status bar shows the Remix AI Copilot is enabled.

The screenshot shows the Remix Ethereum IDE interface. On the left, the sidebar displays the "DEPLOY & RUN TRANSACTIONS" section, which includes a "Deployed Contracts" list containing "RANDOMNESS AT 0x7EF...8CB47 (MEMORY)". Below it, there are input fields for "generateRandom" (seed: 123), "requestRandom" (blockNumber: 6), and "requestCount" (value: 1). The right side of the screen shows the transaction details for the most recent deployment:

status	1 Transaction mined and execution succeed
transaction hash	0xb2061f4f2207262f7b5e065b7a16d45ff6b81b23a3d2d819a348150bcd01719d
block hash	0x951c4431dc5c2e56956723b55dc05e87ec4d48ee85499d406f5e758dcb298aae
block number	7
from	0x58380a6a701c568545dCfcB03FcB875f56beddC4
to	Randomness.generateRandom(uint256) 0x7EF2e0040f5bAe046f6BF797943daFAED08CB47
transaction cost	31279 gas
execution cost	10075 gas
output	0xf063b0eb4789047744afccb570c64a3ef3ceb7f7f5c1b0c1495e7b74fe7f9f12
decoded input	{ "uint256 requestId": "1" }
decoded output	{ "0": "uint256": 108731222569875033593820773688548318528812796892696868923134291875979452266994 }

At the bottom, the status bar indicates "Scam Alert" and "RemixAI Copilot (enabled)".

The screenshot shows the Remix Ethereum IDE interface. On the left, the sidebar displays the "DEPLOY & RUN TRANSACTIONS" section, which includes a "Deployed Contracts" list containing "RANDOMNESS AT 0xDBB...33F" and a "Balance: 0 ETH". Below this are dropdown menus for "generateRando...", "requestRandom", and "requestCount", along with a value input field for "o: uint256: 0". The main workspace contains the Solidity code for the "Randomness.sol" contract:

```
mapping(uint256 => Request) public requests;
event RandomRequested(uint256 requestId, address requester, uint256 seed);
event RandomGenerated(uint256 requestId, uint256 random);
function requestRandom(uint256 _seed) public returns (uint256) {
    requestCount++;
    requests[requestCount] = Request({
        seed: _seed,
        blockNumber: block.number,
        requester: msg.sender
    });
}
```

The "Explain contract" feature is open, showing a tooltip for the "call\_to: Randomness.requestCount" interaction. The tooltip asks, "How are dynamic arrays stored in contract storage?" and provides options to "Select Context", "Ask", or "AI Beta".

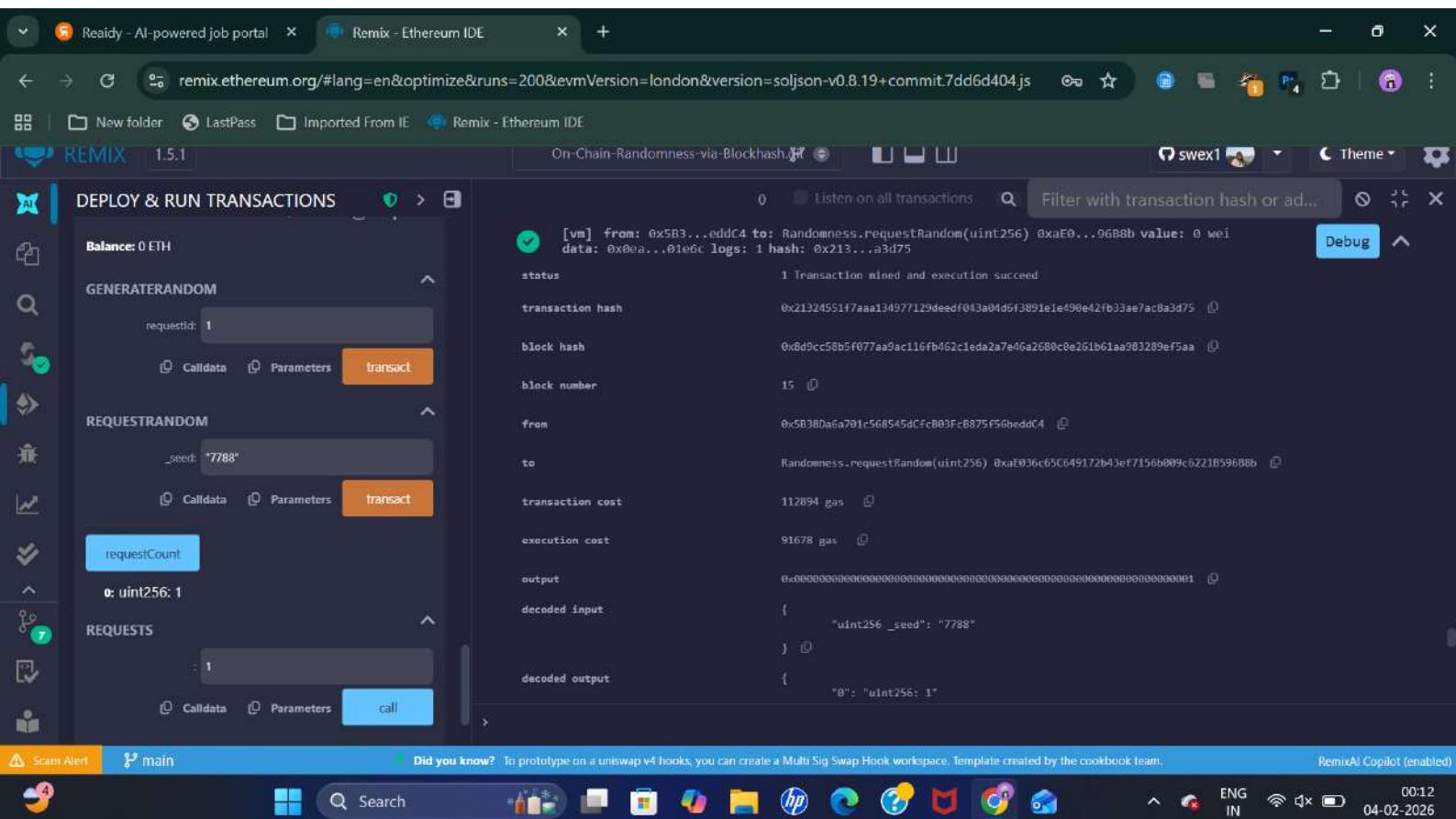
The top navigation bar shows tabs for "Ready - AI-powered job portal", "AI Interview Blockchain Prep", and "Remix - Ethereum IDE". The right side of the interface features the "REMIXAI ASSISTANT" panel, which includes a "RemixAI" section describing its capabilities and a "How are dynamic arrays stored in contract storage?" question. The bottom status bar shows "Scam Alert", "main", "Did you know?", "RemixAI Copilot (enabled)", and system icons.

The screenshot shows the Remix Ethereum IDE interface. On the left, the sidebar displays the "DEPLOY & RUN TRANSACTIONS" section, which includes a "Deployed Contracts" list containing a single entry: "RANDOMNESS AT 0x7EF...8CB4". Below this, there are input fields for "generateRandom" (with value "123") and "requestCount" (with value "1"). Further down, there are fields for "0: uint256: seed 123", "1: uint256: blockNumber 6", and "2: address: requester 0x5838Da6a701c568545dCfcB03FcB875f56beddC4".

The main workspace shows a transaction receipt for a recent call to the "generateRandom" function. The receipt details are as follows:

- [vm] from: 0x583...eddC4 to: Randomness.generateRandom(uint256) 0x7EF...8CB47 value: 0 wei
- data: 0x530...00001 logs: 1 hash: 0xb20...1719d
- status: 1 Transaction mined and execution succeeded
- transaction hash: 0xb2061f4f2207262f7b5a065b7a16dffff6b01b23a3d2d819a348150bcd01719d
- block hash: 0x951c4431dc5c2e56956723b55dc85e87ec40ee85489df06f5e758dc298aae
- block number: 7
- from: 0x5B380a6a791c568545dCfcB03FcB875f56beddC4
- to: Randomness.generateRandom(uint256) 0x7EF2e0048f5bAeDe046f6BF797943daF4ED8CB47
- transaction cost: 31279 gas
- execution cost: 10075 gas
- output: 0xf063b0eb4789047744afccb57bcb4a3ef3ceb7f7f5c1b8c1495e7b74fe7f9ff2
- decoded input: { "uint256 requestId": "1" }
- decoded output: { "0": "uint256: 108731222569875033593820773680548310520812796892696868923134291875970452266994" }

At the bottom of the screen, there is a toolbar with various icons, a search bar, and system status indicators.



Ready - AI-powered job portal

Remix - Ethereum IDE

remix.ethereum.org/#lang=en&optimize&runs=200&evmVersion=London&version=soljson-v0.8.19+commit.7dd6d404.js

New folder LastPass Imported From IE Remix - Ethereum IDE

REMIX 1.5.1

On-Chain-Randomness-via-Blockhash.js

swex1 Theme

Filter with transaction hash or address

DEPLOY & RUN TRANSACTIONS

RANDOMNESS AT 0xae0...96B8B (MEMORY)

Balance: 0 ETH

generateRandom(uint256 requestId) 0x530...00001

requestRandom 7788

requestCount

0: uint256: 1

0: uint256: seed 7788

1: uint256: blockNumber 15

2: address: requester 0x5838Da6a701c568545 dCfcB03FcB875f56beddC4

Low level interactions

CALldata

VM Transaction

[vm] from: 0x5B3...eddC4 to: Randomness.generateRandom(uint256) 0xaE0...96B8B value: 0 wei

data: 0x530...00001 logs: 1 hash: 0xca7...bd575

status 1 Transaction mined and execution succeeded

transaction hash 0xcc7c5701864484d0c2c2779a467d04530f422e4a5003dc0a770e347647bd575

block hash 0x3832be03d98df2a425474d63f00d651241d229a490c2d391adb39d5c72c764c

block number 15

from 0x5B38D0a6a701c568545dCfcB03FcB875f56beddC4

to Randomness.generateRandom(uint256) 0xaE036c65C649172b43ef7156b009c6221859668b

transaction cost 31279 gas

execution cost 10075 gas

output 0x4e47b5a978e08f1ed2983ed56181f7ba305debc2eb1bd7bb7c0a631ab89ec5a

decoded input { "uint256 requestId": "1" }

decoded output { "R": "1" }

Scam Alert main Did you know? To prototype on a uniswap v4 hooks, you can create a Multi Sig Swap Hook workspace. Template created by the cookbook team.

RemixAI Copilot (enabled)

00:12 ENG IN 04-02-2026