```cpp
#include <iostream>
#include <string>
#include <ctime>

using namespace std;

enum {moveLeft=1, moveRight, read, write0, write1, print, quit};

const int TAPE_SIZE = 10;

int main()
{
        bool IsActive = true;

        string tape = "---1011---";

        int TMLocation = 6;
        int Action = 0;

        while (IsActive)
        {
                cout << "Please choose an action:\n";
                cout << "1: move left\n";
                cout << "2: move right\n";
                cout << "3: read\n";
                cout << "4: write 0\n";
                cout << "5: write 1\n";
                cout << "6: print\n";
                cout << "7: quit\n";
                cout << ": ";

                cin >> Action;

                switch (Action)
                {
                        case moveLeft:
                        {
                                cout << "Moving left \n";
                                TMLocation -= 1;
                                if (TMLocation < 0)
                                {
                                        TMLocation = 0;
                                }
                                break;
                        }
                        case moveRight:
                        {
                                cout << "Moving right \n";
                                TMLocation += 1;
```

```cpp
                        if (TMLocation >= TAPE_SIZE)
                        {
                                TMLocation = TAPE_SIZE - 1;
                        }
                        break;
                }
                case read:
                {
                        cout << "Current cell is: " << tape.at(TMLocation) << "\n";
                        break;
                }
                case write0:
                {
                        cout << "Writing 0 to location \n";
                        tape.replace(TMLocation, 1, "0");
                        break;
                }
                case write1:
                {
                        cout << "Writing 1 to location \n";
                        tape.replace(TMLocation, 1, "1");
                        break;
                }
                case print:
                {
                        cout << "CURRENT: " << tape << "\n";
                        cout << "LOC: " << TMLocation << "\n";
                        break;
                }
                case quit:
                {
                        IsActive = false;
                        break;
                }
                default:
                {
                        cout << "Unrecognized command\n";
                        break;
                }

            }
        }

        return 0;
}
```