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//Bit stuffing

#include <iostream>
#include <string>
using namespace std;
/*
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 */
int main()
{
    string stream, stuffedStream;
    cout << "Enter the stream of bits:";
    cin >> stream;
    stuffedStream = stream;

    int count = 0, j, appendedBit = 0;
    int l = stream.length();
    for (int i = 0; i < stream.length(); i++)
    {
        if (stream[i] == '1')
            count++;
        if (stream[i] == '0')
            count = 0;
        if (count == 5)
        {
            count = 0;
            stuffedStream += "0";
            l++;
            appendedBit++;
            j = l;
        }
    }
}

```

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        while (j > i + 2)
        {
            stuffedStream[j - 1] = stuffedStream[j - 2];
            j--;
        }
        stuffedStream[i + appendedBit] = '0';
    }
}

cout << "Output stream after bit stuffing: "
    << "01111110 " << stuffedStream << " 01111110" << endl;
return 0;
}

```

Output:

```

Data communication/Lab Class/"bitStuffing
Enter the stream of bits:0111111101
Output stream after bit stuffing: 01111110 011111011101 01111110
naz365@nazmul-hossain ~/University Fall 2021/Data communication/Lab Class
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```