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CECS 282-Sec 07

Source code:

```
#include <iostream>
#include <string>
#include <math.h>

using namespace std;

int bin2Dec(const string &binaryString){
   int bin2Dec {0};

   int POWERS_OF_TWO[19] = {1,2,4,8,16,32,64,128,256,512,1024,2048,
                            4096,8192,16384,32768,65536,131072,262144};
   for (int i {0}; i < binaryString.length(); i++){
       bin2Dec += (binaryString[i] - 48) * POWERS_OF_TWO[i]; //
subtracting the char value from 48 brings ASCII to regular int value
   }
   return bin2Dec;
}

int main(){
   string binaryNum;
   cout << "Please enter a binary number: ";
   cin >> binaryNum;
   cout << endl;
   cout << binaryNum << " to decimal is: " << bin2Dec(binaryNum) << endl;
   return 0;
}
```

output:

Please enter a binary number: 101

101 to decimal is: 5