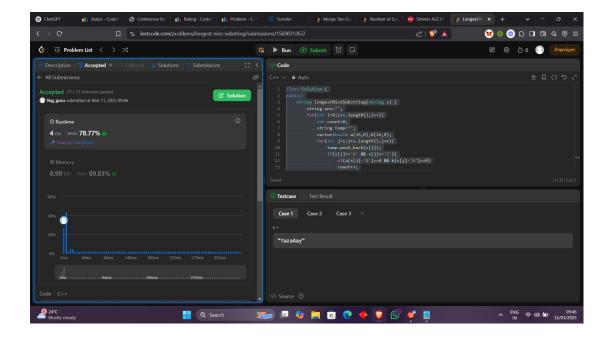
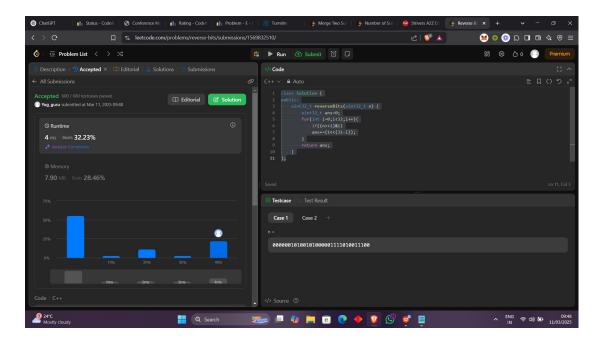
1763. Longest Nice Substring

```
class Solution {
public:
  string longestNiceSubstring(string s) {
     string ans="";
     for(int i=0;i < s.length(); i++){
        int count=0;
        string temp="";
        vector<bool> a(26,0),b(26,0);
        for(int j=i;j < s.length();<math>j++){
          temp.push_back(s[j]);
          if(s[j] \ge A' \&\& s[j] \le Z')
             if(a[s[j]-'A']==0 \&\& b[s[j]-'A']==0)
             count++;
             else if(a[s[j]-'A'] && !b[s[j]-'A'])
             count--;
             b[s[j]-'A']=1;
           }
          else{
             if(b[s[j]-'a']==0 \&\& a[s[j]-'a']==0)
             count++;
             else if(b[s[j]-'a'] && !a[s[j]-'a'])
             count--;
             a[s[j]-'a']=1;
          if(ans.size()<temp.size() && count==0)
          ans=temp;
     }
     return ans;
};
```



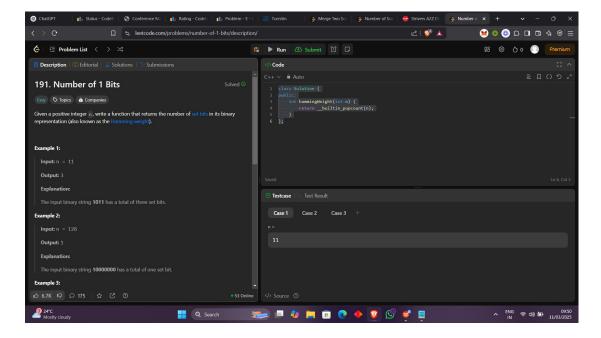
190. Reverse Bits

```
class Solution {
  public:
    uint32_t reverseBits(uint32_t n) {
        uint32_t ans=0;
        for(int i=0;i<32;i++){
            if((n>>i)&1)
            ans+=(1<<(31-i));
        }
        return ans;
    }
};</pre>
```



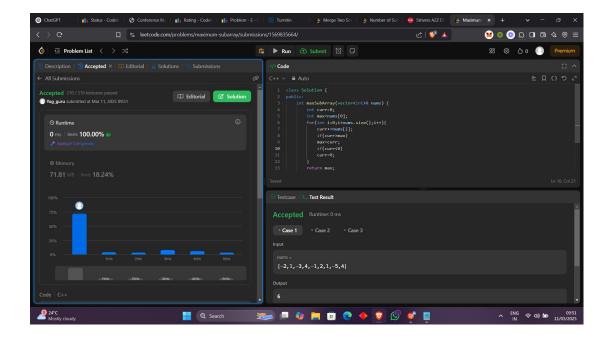
191. Number of 1 Bits

```
class Solution {
public:
   int hammingWeight(int n) {
     return __builtin_popcount(n);
   }
};
```



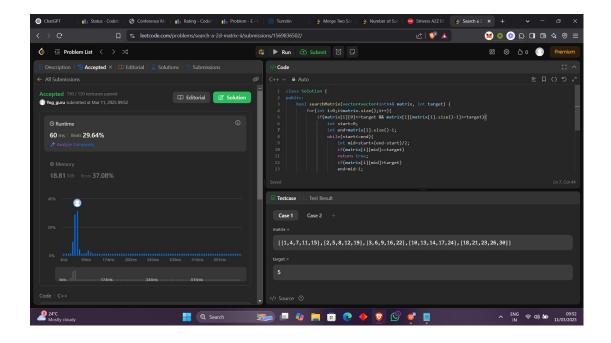
53. Maximum Subarray

```
class Solution {
public:
    int maxSubArray(vector<int>& nums) {
        int curr=0;
        int max=nums[0];
        for(int i=0;i<nums.size();i++){
            curr+=nums[i];
            if(curr>max)
            max=curr;
            if(curr<0)
            curr=0;
        }
        return max;
    }
};</pre>
```



240. Search a 2D Matrix II

```
class Solution {
public:
  bool searchMatrix(vector<vector<int>>& matrix, int target) {
     for(int i=0;i<matrix.size();i++){</pre>
       if(matrix[i][0]<=target && matrix[i][matrix[i].size()-1]>=target){
          int start=0;
          int end=matrix[i].size()-1;
          while(start<=end){</pre>
             int mid=start+(end-start)/2;
             if(matrix[i][mid]==target)
             return true;
             if(matrix[i][mid]>target)
             end=mid-1;
             else
             start=mid+1;
     return false;
};
```



372. Super Pow

```
class Solution {
  const int base = 1337;
  int powmod(int a, int k) //a^k \mod 1337 where 0 \le k \le 10
     a %= base;
     int result = 1;
     for (int i = 0; i < k; ++i)
       result = (result * a) % base;
     return result;
  }
  public:
  int superPow(int a, vector<int>& b) {
     if (b.empty()) return 1;
     int last digit = b.back();
     b.pop back();
     return powmod(superPow(a, b), 10) * powmod(a, last digit) % base;
};
```

