***Week – 5 (26.04.2021 – 02.05.2021)***

***RANDOM CODES***

1. ***Add Strings:***

class Solution {

public:

string addStrings(string num1, string num2) {

int sum = 0, carry = 0, i = num1.size()-1, j = num2.size()-1;

string res = "";

while(i>=0 || j>=0)

{

sum = carry;

carry = 0;

if(i>=0)

{

sum = sum + num1[i] - '0';

i--;

}

if(j>=0)

{

sum = sum + num2[j] - '0';

j--;

}

carry = sum / 10;

sum = sum % 10;

res = to\_string(sum) + res;

}

if(carry!=0) res = to\_string(carry) + res;

return res;

}

};

1. ***Add to Array-Form of Integer:***

class Solution {

public:

vector<int> addToArrayForm(vector<int>& num, int k) {

int i = num.size()-1, sum = 0, carry = 0;

vector<int> result;

while(i>=0 || k>0)

{

sum = carry;

carry = 0;

if(k>0)

{

sum = sum + (k%10);

k = k/10;

}

if(i>=0)

{

sum = sum + num[i];

i--;

}

carry = sum/10;

sum = sum%10;

result.push\_back(sum);

}

if(carry!=0)

{

while(carry>0)

{

sum = carry%10;

result.push\_back(sum);

carry = carry/10;

}

}

reverse(result.begin(), result.end());

return result;

}

};

1. ***First Unique Character in a String:***

class Solution {

public:

int firstUniqChar(string s) {

int fre[26] = {0}, i;

for(i=0; i<s.size(); i++)

fre[s[i] - 'a']++;

for(i=0; i<s.size(); i++)

if(fre[s[i] - 'a'] == 1) return i;

return -1;

}

};