***Week – 4 (19.04.2021 – 25.04.2021)***

***RANDOM CODES***

1. ***Student Attendance Record I:***

class Solution {

public:

bool checkRecord(string s) {

return ((s.find("LLL") == string::npos) && (count(s.begin(), s.end(), 'A') < 2));

}

};

1. ZigZag Conversion:

class Solution {

public:

string convert(string s, int numRows) {

if(numRows == 1 || s.size() == 1) return s;

string res="";

int cycle = 2 \* numRows - 2, i, j;

for(i=0; i<numRows; i++)

{

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

{

res += s[j+i];

if(i!=0 && i!=numRows-1 && j+cycle-i<s.size())

res += s[j+cycle-i];

}

}

return res;

}

};

1. ***Valid Parentheses:***

class Solution {

public:

bool isValid(string s) {

stack <char> st;

int i;

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

{

if(s[i] == '{' || s[i] == '[' || s[i] == '(') st.push(s[i]);

if(s[i] == '}' || s[i] == ']' || s[i] == ')')

{

if(st.size() == 0) return false;

else if(st.top() == '{' && s[i] == '}') st.pop();

else if(st.top() == '(' && s[i] == ')') st.pop();

else if(st.top() == '[' && s[i] == ']') st.pop();

else return false;

}

}

if(st.size() == 0)return true;

else return false;

}

};