**OUTPUT:**

**CODE:**

string longestPalindrome(string s) {

int n = s.size();

vector<vector<int>> dp(n, vector<int>(n, 0));

int st = -1;

int len = 0;

for(int diag = 0; diag < n; diag++)

{

for(int i = 0, j = diag; j < n; i++, j++)

{

if(diag == 0)

dp[i][j] = 1;

else if(diag == 1)

dp[i][j] = (s[i] == s[j]);

else if(s[i] == s[j])

dp[i][j] = dp[i + 1][j - 1];

if(dp[i][j] && j - i + 1 > len)

{

len = diag + 1;

st = i;

}

}

}

return s.substr(st, len);

}