Q. Basic Cpp code to add nodes in Binary tree

```
#include <iostream>
using namespace std;

struct node
{
   public:
   node* left;
   node* right;
   char data;

   node(char v)
   {
      left=NULL; right=NULL; data=v;
   }
};
 bool insert(node* root,char v)
 {
     int ch;
     node* nn=new node(v);

     if(root==NULL)
     {
        root=nn;
       return false;
     }
     else
     {
        cout<<"Do you want to insert node to left or right:"<<endl;
        cout<<"1.Left    2.Right"<<endl;
        cin>>ch;


        switch(ch)
        {
           case 1:

                 if(root->left==NULL)
                 {
                    root->left=nn;
                    cout<<"Node inserted at left successfully"<<endl;
                    return true;
                 }
```

```
            else {
            // Write probable code
            }
            break;

 case 2:
             if (root->right==NULL)
             {
                        root->right=nn;
                        cout<<"Node inserted right successfully"<<endl;
                        return true;
              }
            else {
                    // Write probable code
            }
              break;
             }
return true;
 }
void inorder(node* r)
{
   if(r==NULL)
      return;
   inorder(r->left);
   cout<<r->data<<" ";
   inorder(r->right);
}
void preorder(node* r)
{
   if(r==NULL)
      return;
   cout<<r->data<<" ";
   preorder(r->left);
   preorder(r->right);
}

int main()
{
   node* root=new node('1');
   char val;
   int c;
```

```
    do{
        cout<<"enter the node you want to insert"<<" ";
        cin>>val;
        insert(root,val);

        cout<<"Do you want to continue press: 1.Yes 2.No"<<endl;
        cin>>c;
    }while(c==1);

    cout<<"Inorder display:-";
    inorder(root);
    cout<<endl;
    cout<<"Preorder display:-";
    preorder(root);
   return 0;
}
```