```
TCanvas * CreateC(Int_t i)
{
   TString cName="c";
   TString cTitle="Tree examples ";
   TCanvas *c;
   c=new TCanvas(cName+i,cTitle+i,200,10,600,400);
   return c;
}


void readTree()
{

 // TH1::AddDirectory(kFALSE);

  TCanvas *c[10];

  TFile *file = new TFile("testTree.root"); //opening the root file
  file->ls(); // listing the file content

  TTree * Tout= (TTree*)file->Get("T"); //getting the Tree

  Tout->Print(); //listing the Tree content

  Int_t nentries=Tout->GetEntries(); // number of entries in the Tree
  cout << " nentries in tree = " << nentries << endl;


   //Drawing the Tree variables (automatic loop on Tree entries done by ROOT)

  int i=0;

  CreateC(i)->cd();  i++;
  Tout->Draw("x");//Drawing x looping over all entries, on a temporary histo

  CreateC(i)->cd();  i++;
  Tout->Draw("x","","",1000,nentries-1000);//same as above, but for the last 1000 entries

  CreateC(i)->cd();  i++;
  Tout->Draw("y:x");//Drawing y vs x, looping over all entries, on a temporary histo

  TH1F *h1=new TH1F("h1","x distribution",200, -10., 10.);
  CreateC(i)->cd();  i++;
  Tout->Draw("x>>h1","y>10.");//Drawing x over a predefined histo h1 and apply a selection on
y.

  CreateC(i)->cd();  i++;
  Tout->Draw("sqrt(x**2+y**2)","log(y)>1.");//you may use functions

  CreateC(i)->cd();  i++;
  Tout->Draw("sqrt(x**2+y**2):log(z)","y>1 && x<0");//correlation plot with selection

  //in this mode, the user loops explicitly over the tree and can recover/select each of the
entries
```

```
  Float_t x,y,z;

  //connecting local variables x,y,z to the tree variables

  Tout->SetBranchAddress("x",&x);
  Tout->SetBranchAddress("y",&y);
  Tout->SetBranchAddress("z",&z);

  for(Int_t i=0;i<nentries;i++){
    if(i%10000==0){
      Tout->GetEntry(i);
      cout << " x = "<< x <<" y = " << y << " z = " << z << endl;
    }
  }
 file->Close(); //closing the file
}
```