Vector of Vector

Suppose you wish to create a matrix:-

Ram Shyam Sam
Hari Gopal Tim

Then you need to do the following things:-

```
vector <vector <string> > v1;
vector <string> v2;

v2.push_back("Ram");
v2.push_back("Shyam");
v2.push_back("Sam");

v1.push_back(v2);

v2.clear();

v2.push_back("Hari");
v2.push_back("Gopal");
v2.push_back("Tim");

v1.push_back(v2);
```

Now if you want to print the matrix:-

```
for(int i=0;i<v1.size();i++){
   for(int j=0;j<v2.size();j++){
      cout << v1[i][j] << " ";
   }
   cout<<endl;
}
```

Alternative way of declaration:-

```
vector <string> v2(3);
vector <vector <string> > v1(2,v2);


v2[0] = "Ram" ;
v2[1] = "Shyam";
v2[2] = "Sam";

v1[0] = v2;

v2[0] = "Hari" ;
v2[1] = "Gopal";
v2[2] = "Tim";

v1[1] = v2;;

for(int i=0;i<v1.size();i++){
   for(int j=0;j<v2.size();j++){
      cout << v1[i][j] << " ";
   }
   cout<<endl;
}
```
