***a).Signup***

global declaration

**private** FirebaseAuth **mAuth**;  
**private** FirebaseAuth.AuthStateListener **mAuthListener**;

inside onCreate()

**btn\_signup\_submit**.setOnClickListener(**this**);  
  
**mAuth** = FirebaseAuth.*getInstance*();  
**mAuthListener** = **new** FirebaseAuth.AuthStateListener() {  
  
 @Override  
 **public void** onAuthStateChanged(@NonNull FirebaseAuth firebaseAuth) {  
 FirebaseUser user = firebaseAuth.getCurrentUser();  
 **if** (user != **null**) {  
 // Log.*d*(**""**, **"onAuthStateChanged:signed\_in:"** + user.getUid());  
 } **else** {  
 // Log.*d*(**""**, **"onAuthStateChanged:signed\_out"**);  
 }  
 }  
};

remaining code

**public void** onStart()  
{  
 **super**.onStart();  
 **mAuth**.addAuthStateListener(**mAuthListener**);  
}  
**public void** onStop()  
{  
 **super**.onStop();  
 **if** (**mAuthListener** != **null**)  
 {  
 **mAuth**.removeAuthStateListener(**mAuthListener**);  
 }  
}  
  
  
**private void** createUser(**final** String email, String password)  
{  
 **mAuth**.createUserWithEmailAndPassword(email,password).addOnCompleteListener(**this**, **new** OnCompleteListener<AuthResult>() {  
 @Override  
 **public void** onComplete(@NonNull Task<AuthResult> task)  
 {  
 **if**(task.isSuccessful())  
 {  
 Toast.*makeText*(SignupActivity.**this**, **"Signup successful"**, Toast.***LENGTH\_SHORT***).show();  
 saveUserDataToDatabase(task.getResult().getUser(),**name**,email);  
 }  
 **else** {  
 Toast.*makeText*(SignupActivity.**this**, **"Signup not successful"**, Toast.***LENGTH\_SHORT***).show();  
 }  
  
 }  
 }  
 );  
  
}

@Override  
**protected void** onPause() {  
 **super**.onPause();  
 finish();  
}

onClick()

**else** {  
 createUser(**email**,**password**);  
 Toast.*makeText*(**this**, **"Registering!!!"**, Toast.***LENGTH\_LONG***).show();  
}