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Exercise : 1

Create "Hello World" application. That will display "Hello World" in the middle of the screen in thered color with white background.

File Name : main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    android:background="#FFFFFF">
    <TextView android:layout_height="wrap_content"
android:layout_width="fill_parent" android:textColor="#000000"
android:text="www.master-gtu.blogspot.com"
android:layout_alignParentTop="true"
android:layout_alignParentLeft="true"
android:paddingLeft="60dip"></TextView>
    <TextView android:layout_height="wrap_content"
android:id="@+id/textView1"
android:textAppearance="?android:attr/textAppearanceLarge"
android:layout_width="wrap_content"
android:layout_centerVertical="true"
android:layout_centerHorizontal="true" android:textColor="#FF0000"
android:text="HELLO WORLD"></TextView>
</RelativeLayout>
```

Exercise : 2

> **To understand Activity, Intent**
> **a. Create sample application with login module.(Check username and password)**
> **b. On successful login,go to next screen. And on failing login, alert user using Tost**
> **c. Also pass username to next screen.**

File Name : <u>PROGRAM 2.html</u>

```
package ps.pro2;
package ps.pro2;
import android.app.Activity;
import android.content.Intent;
import android.view.View.*;
import android.os.Bundle;
import android.widget.*;


public class Pro2Activity extends Activity implements View.OnClickListener {
      Button btlogin,btclear;
      EditText editusername,editpassword;
      TextView textmsg;
   @Override
   public void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.main);
      editusername=(EditText)findViewById(R.id.username);
      editpassword=(EditText)findViewById(R.id.password);
      btlogin=(Button) findViewById(R.id.btlogin);
      btclear=(Button) findViewById(R.id.btclear);
      btlogin.setOnClickListener(this);
      btclear.setOnClickListener(this);
   }
      @Override
      public void onClick(View v) {
      // TODO Auto-generated method stub
      Button action=(Button) v;
      String name,pass;
      boolean flagusername=false;
      boolean flagpassword=false;
      name=editusername.getText().toString();
      pass=editpassword.getText().toString();
      if(name.equals("")){      flagusername=true;      }
      if(pass.equals("")) {      flagpassword=true;      }
      if(btlogin.getId()==action.getId())      {
if(flagusername==false && flagpassword==false)            {
      if(pass.equals(name+"@123"))                  {
Toast.makeText(this,"Login success...", Toast.LENGTH_SHORT).show();
```

```
Intent myintent=new Intent(this,home.class);
myintent.putExtra("name", name);
this.startActivity(myintent);
                  }
                  else
Toast.makeText(this,"Login faild…", Toast.LENGTH_SHORT).show();
          }
          else          {          if(flagusername==true)
Toast.makeText(this,"Pls Enter Username…", Toast.LENGTH_SHORT).show();
else if(flagpassword==true)
Toast.makeText(this,"Pls Enter Password…", Toast.LENGTH_SHORT).show();
}}
else if(btclear.getId()==action.getId()){
if(flagusername==false || flagpassword==false){
editusername.setText("");
      editpassword.setText("");
      Toast.makeText(this,"Field Cleared…", Toast.LENGTH_SHORT).show();
}
else   {
Toast.makeText(this,"Already Cleared…", Toast.LENGTH_SHORT).show();
}}}}
```

FILE Name : home.java

```
package ps.pro2;
import android.app.Activity;
import android.os.Bundle;
import android.view.View.*;
import android.widget.*;
public class home extends Activity implements
OnClickListener {
TextView textmsg;
    Button btback;
  @Override
  public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.home);
    textmsg=(TextView) findViewById(R.id.textmsg);
    btback=(Button) findViewById(R.id.btback);
    btback.setOnClickListener(this);
  }
```

Exercise : 3

> **Create login application where you will have to validate EmailID(UserName). Till the username and password is not validated , login button should remain disabled.**

File Name : <u>pro3.java</u>

```java
package ps.pro3;
import android.app.Activity;
import android.os.Bundle;
import android.text.*;
import android.view.View.*;
import android.widget.*;
public class Pro3Activity extends Activity implements TextWatcher,
OnClickListener  {
        EditText editemailid,editpassword;
        Button btlogin,btclear;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        editemailid=(EditText) findViewById(R.id.editemail);
        editpassword=(EditText)findViewById(R.id.editpassword);
        btlogin=(Button) findViewById(R.id.btlogin);
        btclear=(Button) findViewById(R.id.btclear);
        editemailid.addTextChangedListener(this);
        editpassword.addTextChangedListener(this);
        btclear.setOnClickListener(this);
        btlogin.setOnClickListener(this);
        editemailid.setFocusable(true);
    }
        @Override
        public void afterTextChanged(Editable v) {
        int fatpos,latpos,fdotpos,ldotpos,i;
        String email=editemailid.getText().toString();
        String pass=editpassword.getText().toString();
        boolean emailflag=true,passflag=true,flag=false;
        fatpos=email.indexOf("@");
        latpos=email.lastIndexOf("@");
        fdotpos=email.indexOf(".");
        ldotpos=email.lastIndexOf(".");
if(email.equals(""))                    emailflag=false;
else if(fatpos==-1)                     emailflag=false;
else if(fatpos!=latpos)                 emailflag=false;
else if(fdotpos==-1 )                   emailflag=false;
else if(fdotpos==0)                     emailflag=false;
else if(fatpos==0)                      emailflag=false;
```

```
else if(latpos==email.length()-1)        emailflag=false;
else if(email.charAt(fatpos-1)=='.' || email.charAt(fatpos+1)=='.')
            emailflag=false;
else if(ldotpos==email.length()-1)        emailflag=false;
else if(ldotpos<fatpos)                   emailflag=false;
else if(fdotpos!=ldotpos){
for(i=fdotpos;i<=ldotpos;i++){
        if(email.charAt(i)=='.')    {        if(flag==true)             {
        emailflag=false;
        break;}
flag=true;    }
else
        flag=false;}}
if(pass.equals(""))
        passflag=false;
if(emailflag==true && passflag==true){
            btlogin.setEnabled(true);
}}
@Override
public void beforeTextChanged(CharSequence arg0, int arg1, int arg2,
        int arg3) {}
@Override
public void onTextChanged(CharSequence arg0, int arg1, int arg2, int arg3) {}
@Override
public void onClick(View v) {
Button action=(Button) v;
if(action.getId()==btlogin.getId()){
Toast.makeText(this, "Login Success...", Toast.LENGTH_SHORT).show();
}
else if(action.getId()==btclear.getId())
{
if(!editemailid.getText().toString().equals("") ||
!editpassword.getText().toString().equals(""))
{

editemailid.setText("");
editpassword.setText("");
}
Else
{
Toast.makeText(this,"Already Cleared...", 100).show();
}}}}
```

Exercise : 4
Create and Login application as above . On successful login , open browser with any URL
File Name : <u>pro4.java</u>

```java
package ps.pro4;
import android.app.Activity;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.View.*;
import android.widget.*;
public class Pro4Activity extends Activity implements OnClickListener {
        Button btlogin,btclear;
        EditText editemail,editpass;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        editemail=(EditText) findViewById(R.id.editemail);
        editpass=(EditText) findViewById(R.id.editpass);
        btlogin=(Button) findViewById(R.id.btlogin);
        btclear=(Button) findViewById(R.id.btclear);
        btlogin.setOnClickListener(this);
        btclear.setOnClickListener(this);
    }
        @Override
public void onClick(View v) {
Button action=(Button) v;
if(action.getId()==btlogin.getId()){
        String email=editemail.getText().toString();
        String pass=editpass.getText().toString();
        if(email.equals("pankaj@gmail.com") && pass.equals("pankaj"))
        {
        Intent myintent=new
Intent(Intent.ACTION_VIEW,Uri.parse("http://www.gmail.com"));
this.startActivity(myintent);
}       else    {
Toast.makeText(this,"Sorry", Toast.LENGTH_SHORT).show();
}}
else if(action.getId()==btclear.getId())
{
if(!editemail.getText().toString().equals("") ||
!editpass.getText().toString().equals("")){
                editemail.setText("");
```

```
            editpass.setText("");
}       else
{
Toast.makeText(this,"Already Cleared…", Toast.LENGTH_SHORT).show();
}}
}}
```

Exercise : 5

Create an application that will pass some number to the next screen , and on the next screen that number of items should be display in the list.

File Name : <u>pro5.java</u>

```
package ps.pro5;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View.*;
import android.widget.*;
public class Pro5Activity extends Activity implements OnClickListener {
        EditText editnum;
        Button btshow;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        editnum=(EditText) findViewById(R.id.editTextNumber);
        btshow=(Button) findViewById(R.id.buttonshow);
        btshow.setOnClickListener(this);
    }
        @Override
        public void onClick(View v) {
if(v.getId()==btshow.getId())
{
Intent myintent=new Intent(this,listActivity.class);
myintent.putExtra("num", Integer.parseInt(editnum.getText().toString()));
this.startActivity(myintent);
}}}
```

FILE NAME:ListActivity.java

```
package ps.pro5;
import android.app.Activity;
import android.os.Bundle;
import android.view.View.*;
import android.widget.*;
public class listActivity extends Activity implements  OnItemClickListener {
    /** Called when the activity is first created. */
        ListView lv;
        String items[];
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.listlayout);
```

```
        lv=(ListView) findViewById(R.id.listViewItems);
        int num=getIntent().getIntExtra("num", 0);
        items=new String[num];
        for(int i=0;i<num;i++)
        {        items[i]="item "+(i+1);        }
ArrayAdapter<String> arr=new ArrayAdapter<String>(this,
android.R.layout.simple_list_item_1,items);
        lv.setAdapter(arr);
        lv.setOnItemClickListener(this);
    }
@Override
public void onItemClick(AdapterView<?> arg0, View arg1, int pos, long arg3) {
Toast.makeText(this,items[pos] + " selected", Toast.LENGTH_SHORT).show();
}}
```

Exercise : 6

Understand resource folders :
a. Create spinner with strings taken from resource folder(res >> value folder).
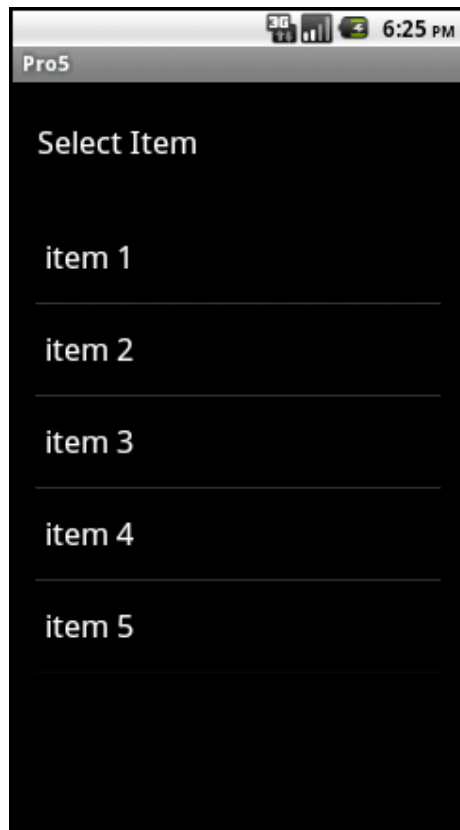**b. On changing spinner value, change image.**

File Name : pro6.java

```java
package ps.pro6;
import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.widget.*;
public class Pro6Activity extends Activity implements OnItemSelectedListener {
    Spinner spin;
    ImageView img;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        spin=(Spinner) findViewById(R.id.spinnernames);
        img=(ImageView) findViewById(R.id.imageView1);
        spin.setOnItemSelectedListener(this);
    }
@Override
public void onItemSelected(AdapterView<?> arg0, View arg1, int arg2,
        long arg3) {
        String
name=spin.getSelectedItem().toString();
if(name.equals("AMI"))
img.setImageResource(R.drawable.ami);
else if(name.equals("MEHUL"))
img.setImageResource(R.drawable.mehul);
else if(name.equals("PANKAJ"))
img.setImageResource(R.drawable.pankaj);
else if(name.equals("JIGNESH"))
img.setImageResource(R.drawable.jignesh);
else if(name.equals("VIJAY"))
img.setImageResource(R.drawable.vijay);
else if(name.equals("SATISH"))
img.setImageResource(R.drawable.satish);
}
@Override
public void onNothingSelected(AdapterView<?>
arg0) {
}}
```

Exercise : 7
   Understand Menu option
   a. **Create an application that will change color of the screen, based on selected options from the menu.**

File Name : <u>pro7.java</u>

```java
package ps.pro7;
import android.app.Activity;
import android.graphics.Color;
import android.os.Bundle;
import android.view.*;
import android.view.View.*;
import android.widget.AbsoluteLayout;
@SuppressWarnings("deprecation")
public class Pro7Activity extends Activity {
        AbsoluteLayout al;
        @Override
   public void onCreate(Bundle savedInstanceState) {
      super.onCreate(savedInstanceState);
      setContentView(R.layout.main);
      al=(AbsoluteLayout) findViewById(R.id.alayout);
      al.setOnCreateContextMenuListener(this);
   }
public void createMenu(Menu menu)    {
            MenuItem m1=menu.add(0,0,0,"RED");
            m1.setAlphabeticShortcut('r');
            m1.setIcon(R.drawable.icon);
            MenuItem m2=menu.add(0,1,1,"GREEN");
            m2.setAlphabeticShortcut('g');
            m1.setIcon(R.drawable.icon);
            MenuItem m3=menu.add(0,2,2,"BLUE");
            m3.setAlphabeticShortcut('b');
            m1.setIcon(R.drawable.icon);
}
public void listenMenu(MenuItem item){        int id=item.getItemId();
      switch(id)    {
      case 0:
            al.setBackgroundColor(Color.RED);
            break;
      case 1:
            al.setBackgroundColor(Color.GREEN);
            break;
      case 2:
            al.setBackgroundColor(Color.BLUE);
            break;
```

```
    }       }
@Override
public boolean onCreateOptionsMenu(Menu menu) {
    super.onCreateOptionsMenu(menu);
    createMenu(menu);
    return true;
}
@Override
public boolean onOptionsItemSelected(MenuItem item) {
    super.onOptionsItemSelected(item);
    listenMenu(item);
    return true;
}
@Override
public void onCreateContextMenu(ContextMenu menu, View v,
        ContextMenuInfo menuInfo) {
    // TODO Auto-generated method stub
    super.onCreateContextMenu(menu, v, menuInfo);
    createMenu(menu);
}
@Override
public boolean onContextItemSelected(MenuItem item) {
    // TODO Auto-generated method stub
    super.onContextItemSelected(item);
    listenMenu(item);
    return true;
}}
```
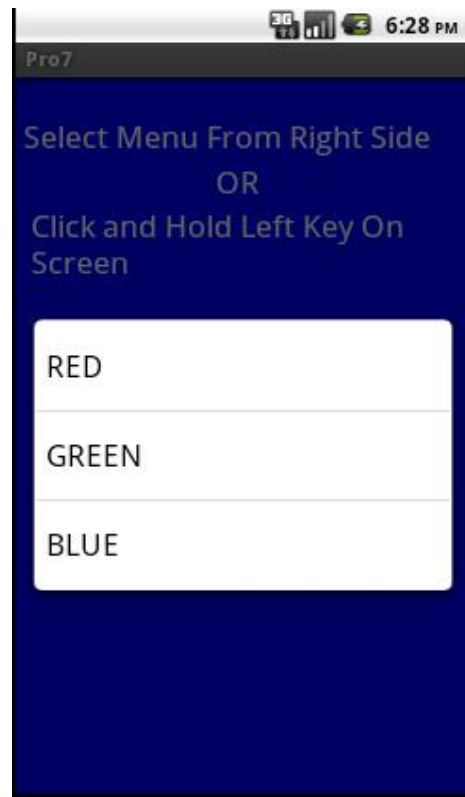
Exercise : 8
  Create an application that will display toast(Message) on specific interval of time

File Name : <u>pro8.java</u>

```
package ps.pro8;
import android.app.Activity;
import android.os.Bundle;
import android.view.View.*;
import android.widget.*;
public class Pro8Activity extends Activity implements OnClickListener,
OnChronometerTickListener {
        EditText editsec;
        Button btclick;
        TextView msg;
        Chronometer timer;
        int sec=0,delay=0;
    @Override
public void onCreate(Bundle savedInstanceState)
{
super.onCreate(savedInstanceState);
setContentView(R.layout.main);
editsec=(EditText) findViewById(R.id.editTextsec);
btclick=(Button) findViewById(R.id.buttonclick);
msg=(TextView) findViewById(R.id.textViewmsg);
timer=(Chronometer)
findViewById(R.id.chronometer1);
btclick.setOnClickListener(this);
timer.setOnChronometerTickListener(this);
    }
        @Override
public void onClick(View v) {
if(v.getId()==btclick.getId()){
delay=Integer.parseInt(editsec.getText().toString());
        sec=0;
        timer.start();
}       }
@Override
public void onChronometerTick(Chronometer arg0) {
msg.setText("Text Next Message is [ 0"+ (delay-sec) +" ] sec delay");
sec++;
if(sec==delay)      {
        sec=0;
Toast.makeText(this, "Heres The Message...", Toast.LENGTH_SHORT).show();
}}}
```

Exercise : 10
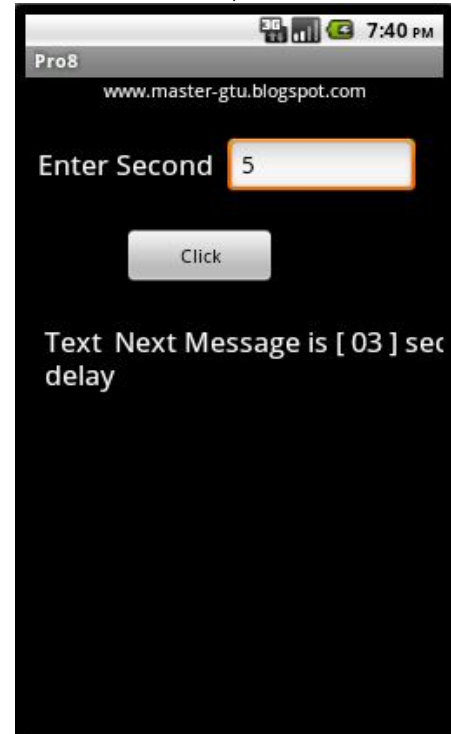   **Create an application that will display toast(Message) on specific interval of time**
File Name : pro10.java
package ps.pro10;

import android.app.Activity;
import android.os.Bundle;
import android.view.View;
import android.view.animation.Animation;
import android.view.animation.AnimationUtils;
import android.widget.AdapterView;
import android.widget.AdapterView.OnItemSelectedListener;
import android.widget.ImageView;
import android.widget.Spinner;

```java
public class Pro10Activity extends Activity implements OnItemSelectedListener {
    /** Called when the activity is first created. */
        Spinner spin;
        ImageView imgmaster;

    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        spin=(Spinner) findViewById(R.id.spinnereffect);
        imgmaster=(ImageView) findViewById(R.id.imageViewmaster);

        spin.setOnItemSelectedListener(this);

    }


        @Override
        public void onItemSelected(AdapterView<?> arg0, View arg1, int arg2,
                    long arg3) {
            // TODO Auto-generated method stub
            Animation anim=AnimationUtils.loadAnimation(this, R.anim.alpha);
            if(spin.getSelectedItem().equals("alpha"))
                    anim=AnimationUtils.loadAnimation(this, R.anim.alpha);
            else if(spin.getSelectedItem().equals("Rotate"))
                    anim=AnimationUtils.loadAnimation(this, R.anim.rotate);
            else if(spin.getSelectedItem().equals("Scale"))
                    anim=AnimationUtils.loadAnimation(this, R.anim.scale);
            else if(spin.getSelectedItem().equals("Translate"))
                    anim=AnimationUtils.loadAnimation(this, R.anim.translate);
```

```java
            imgmaster.startAnimation(anim);
        }

        @Override
        public void onNothingSelected(AdapterView<?> arg0) {
            // TODO Auto-generated method stub

        }
}
```

FILE NAME: alpha.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <alpha
    android:fromAlpha="0.0"
    android:toAlpha="1.0"
    android:duration="5000"
    ></alpha>
</set>
```

FILE NAME: rotate.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <rotate
    android:fromDegrees="0"
    android:toDegrees="360"
    android:pivotX="50%"
    android:pivotY="50%"
    android:duration="5000"
    ></rotate>
</set>
```

FILE NAME: scale.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
    <scale
        android:pivotX="50%"
        android:pivotY="50%"
        android:fromXScale="1.0"
        android:fromYScale="1.0"
        android:toXScale="2.0"
        android:toYScale="2.0"
        android:duration="5000"
    />
</set>
```

FILE NAME: translate.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<set xmlns:android="http://schemas.android.com/apk/res/android">
     <translate
          android:toYDelta="-100"
          android:fillAfter="true"
          android:duration="5000">
     </translate>
</set>
```

Exercise : 11

Understanding of UI :

a. Create an UI such that , one screen have list of all the types of cars.

b. On selecting of any car name, next screen should show Car details like : name , launched date , company name, images(using gallery) if available, show different colors in which it is available.

File Name : <u>pro11Acivity.java</u>

```java
package ps.pro11;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.Toast;
import android.widget.AdapterView.OnItemClickListener;
import android.widget.ListView;

public class Pro11Activity extends Activity implements OnItemClickListener {
ListView lv;
  @Override
  public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.main);
    lv=(ListView) findViewById(R.id.listView1);
    lv.setOnItemClickListener(this);
  }
      @Override
      public void onItemClick(AdapterView<?> arg0, View arg1, int pos, long arg3) {
            Toast.makeText(this, pos + " click", Toast.LENGTH_SHORT).show();
            Intent myintent=new Intent(this,Details.class);
            myintent.putExtra("id", pos);
            startActivity(myintent);
}}
```

File Name : <u>ImageAdapter.java</u>

```java
package ps.pro11;
import android.content.Context;
import android.util.Log;
import android.*;
import android.widget.*;

public class ImageAdapter extends BaseAdapter {
      Context c;
      int id;
Integer
listmarutisuzuki[]={R.drawable.marutisuzuki1,R.drawable.marutisuzuki2,R.drawable.marutisuzuki3};        Integer listalto[]={R.drawable.alto1,R.drawable.alto2,R.drawable.alto3};
      Integer listhundai[]={R.drawable.hundai1,R.drawable.hundai2,R.drawable.hundai3};
      Integer listoodi[]={R.drawable.oodi1,R.drawable.oodi2,R.drawable.oodi3};
      public ImageAdapter(Context c,int id)  {
            this.c=c;
            this.id=id;
            Log.d("master", id+"clicked");
      }
      @Override
```

```
        public int getCount() {
if(id==0)                    {                    return listmarutisuzuki.length;          }
if(id==1)                    {                    return listalto.length;                  }
if(id==2)                    {                    return listhundai.length;                }
if(id==3)                    {                    return listoodi.length;                  }
        return listmarutisuzuki.length;
        }
@Override
public Object getItem(int arg0) {                    return arg0;      }
@Override
public long getItemId(int arg0) {                    return arg0;      }
@Override
public View getView(int arg0, View arg1, ViewGroup arg2) {
        ImageView img=new ImageView(c);
        if(id==0)      {      img.setImageResource(listmarutisuzuki[arg0]);          }
        if(id==1)      {      img.setImageResource(listalto[arg0]);                  }
        if(id==2)      {      img.setImageResource(listhundai[arg0]);                }
        if(id==3)      {      img.setImageResource(listoodi[arg0]);                  }
        img.setScaleType(ImageView.ScaleType.FIT_XY);
        img.setLayoutParams(new Gallery.LayoutParams(120, 200));
        return img;
}}
```

File Name : enlarge.java

```
package ps.pro11;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.widget.ImageView;
public class enlarge extends Activity {
        ImageView imgview;
        @Override
        protected void onCreate(Bundle savedInstanceState) {
                // TODO Auto-generated method stub
                super.onCreate(savedInstanceState);
                setContentView(R.layout.enlarge);
                Intent myintent2=getIntent();
                int id=myintent2.getIntExtra("id", 0);
                imgview=(ImageView) findViewById(R.id.imageView1);
                imgview.setImageResource(id);
        }
}
```

File Name : Details.java

```
package ps.pro11;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.*;
public class Details extends Activity implements OnItemClickListener {
        TextView tvname,tvdate,tvcompanyname;
        Gallery gv;
        ImageAdapter obj;
        int id=0;
```

```
        Integer
listmarutisuzuki[]={R.drawable.marutisuzuki1,R.drawable.marutisuzuki2,R.drawable.marutisuzuki
3};
        Integer listalto[]={R.drawable.alto1,R.drawable.alto2,R.drawable.alto3};
        Integer listhundai[]={R.drawable.hundai1,R.drawable.hundai2,R.drawable.hundai3};
        Integer listoodi[]={R.drawable.oodi1,R.drawable.oodi2,R.drawable.oodi3};
        @Override
        protected void onCreate(Bundle savedInstanceState) {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.details);
                tvname=(TextView) findViewById(R.id.textViewname);
                tvdate=(TextView) findViewById(R.id.textViewdate);
                tvcompanyname=(TextView) findViewById(R.id.textViewcompanyname);
                gv=(Gallery) findViewById(R.id.gallery1);
                Intent myintent=getIntent();
                id=myintent.getIntExtra("id", 0);
                if(id==0)
                {
                        tvname.setText("maruti suzuki");
                        tvdate.setText("1-12-1987");
                        tvcompanyname.setText("Maruti");
                }
                if(id==1)
                {
                        Toast.makeText(this, id+" clicked", Toast.LENGTH_SHORT).show();
                        tvname.setText("maruti alto");
                        tvdate.setText("2-01-1988");
                        tvcompanyname.setText("Maruti");
                }
                if(id==2)
                {
                        tvname.setText("hundai i10");
                        tvdate.setText("2-12-1987");
                        tvcompanyname.setText("Hundai");
                }
                if(id==3)
                {
                        tvname.setText("oodi");
                        tvdate.setText("1-10-1993");
                        tvcompanyname.setText("Oodi");
                }

                obj=new ImageAdapter(this,id);
                gv.setAdapter(obj);
                gv.setOnItemClickListener(this);
        }
        @Override
        public void onItemClick(AdapterView<?> arg0, View arg1, int pos, long arg3)
        {
                // TODO Auto-generated method stub
                Intent myintent2=new Intent(this,enlarge.class);
                if(id==0)
                        myintent2.putExtra("id", listmarutisuzuki[pos]);
                else if(id==1)
                        myintent2.putExtra("id", listalto[pos]);
```

```
            else if(id==2)
                    myintent2.putExtra("id", listhundai[pos]);
            else if(id==3)
                    myintent2.putExtra("id", listoodi[pos]);
            startActivity(myintent2);
        }
}
```

Exercise : 14

Create an application to call specific entered number by user in the EditText.

File Name : <u>pro14Acivity.java</u>

```java
package ps.pro14;
import android.app.Activity;
import android.content.Intent;
import android.net.Uri;
import android.os.Bundle;
import android.view.*;
import android.widget.*;
public class Pro14Activity extends Activity implements OnClickListener {
        EditText num;
        Button dial;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        num=(EditText) findViewById(R.id.editTextnum);
        dial=(Button) findViewById(R.id.buttondial);
        dial.setOnClickListener(this);
    }
        @Override
        public void onClick(View v) {
                // TODO Auto-generated method stub
                if(v.getId()==dial.getId())
                {
Intent myintent=new Intent(Intent.ACTION_DIAL, Uri.parse("tel:"+num.getText()));
                        startActivity(myintent);
                }
        }
}
```
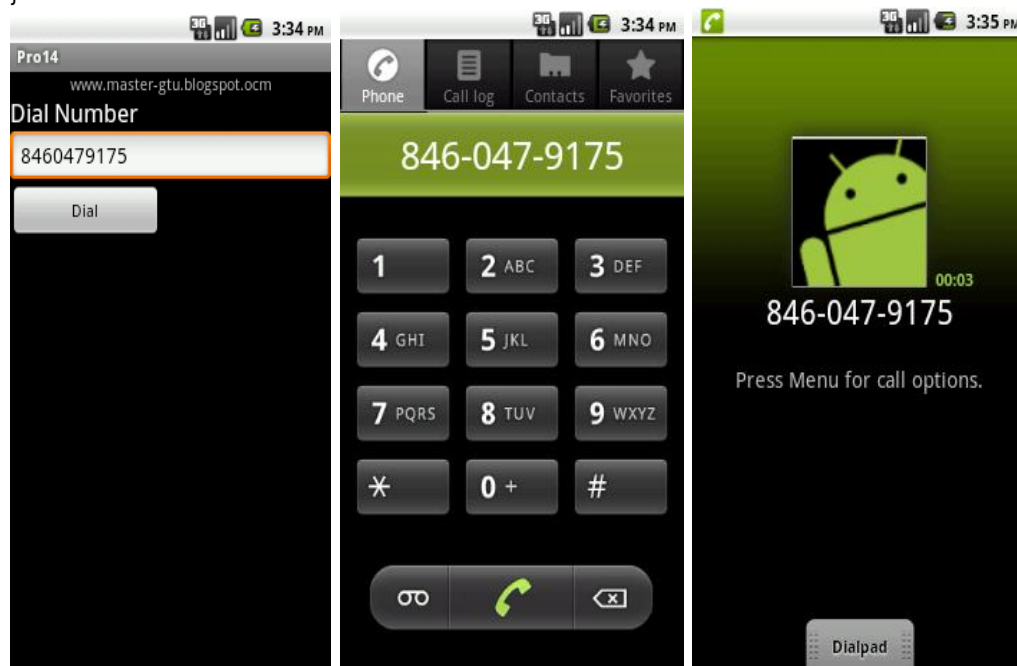
Exercise : 11

Create an application to make Insert , update , Delete and retrieve operation on the database.

File Name : pro18Acivity.java

```java
package ps.dboperation;
import android.app.Activity;
import android.content.*;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.*;
public class DboperationActivity extends Activity {
        SQLiteDatabase db;
    @Override
    public void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.main);
        Context obj=getApplicationContext();
        obj.setTheme(android.R.drawable.screen_background_dark);
        db=openOrCreateDatabase("Master", SQLiteDatabase.CREATE_IF_NECESSARY, null);
        db.execSQL("create table if not exists Friends (id integer primary key, name text not null,
age integer not null, phone text not null );");
    }
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        super.onCreateOptionsMenu(menu);
    MenuItem mnu1=menu.add(0, 0, 0, "INSERT");
        mnu1.setIcon(android.R.drawable.ic_input_add);
    MenuItem mnu2=menu.add(0, 1, 1, "UPDATE");
        mnu2.setIcon(R.drawable.update);
MenuItem mnu3=menu.add(0, 2, 2, "DELETE");
        mnu3.setIcon(R.drawable.delete);
MenuItem mnu4=menu.add(0, 3, 3, "VIEW");
        mnu4.setIcon(R.drawable.view);
        return true;
    }
    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        super.onOptionsItemSelected(item);
        int id=item.getItemId();
        if(id==0)        this.startActivity(new Intent(this,insert.class));
        else if (id==1)  this.startActivity(new Intent(this,update.class));
        else if(id==2)   this.startActivity(new Intent(this,delete.class));
        else if(id==3)   this.startActivity(new Intent(this,view.class));
        return true;
    }
}
```

File Name : Delete.java

```java
package ps.dboperation;
import android.app.Activity;
import android.database.*;
import android.os.Bundle;
import android.*;
public class delete extends Activity implements OnClickListener, TextWatcher {
        EditText edname,edage,edphone,edSearch;
        Button btdel,btclear;
        String setname;
        SQLiteDatabase db;
        @Override
        protected void onCreate(Bundle savedInstanceState) {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.delete);
db=openOrCreateDatabase("Master", SQLiteDatabase.CREATE_IF_NECESSARY, null);
                edSearch=(EditText) findViewById(R.id.editTextsearch);
                edname=(EditText) findViewById(R.id.editTextnamedel);
                edage=(EditText) findViewById(R.id.editTextagedel);
                edphone=(EditText) findViewById(R.id.editTextphonedel);
                btdel=(Button) findViewById(R.id.buttondeldel);
                btclear=(Button) findViewById(R.id.buttoncleardel);
                edSearch.setFocusable(true);
                edname.setFocusable(false);
                edname.setEnabled(false);
                edage.setEnabled(false);
                edphone.setEnabled(false);
                btdel.setOnClickListener(this);
                btclear.setOnClickListener(this);
                edSearch.addTextChangedListener(this);
        }
        @Override
        public void onClick(View v) {
                Button action=(Button) v;
                if(action.getText().toString().equals("Delete"))            {
                        String name=edSearch.getText().toString();
                        String q="delete from Friends where name='"+name+"'";
                        Toast.makeText(this, q, Toast.LENGTH_SHORT).show();
                        db.execSQL(q);
Toast.makeText(this, "Deleted Success...", Toast.LENGTH_SHORT).show();
                }
                else if(v.getId()==btclear.getId())                {
                        clearField();
                        Toast.makeText(this, "Field Cleared...",Toast.LENGTH_SHORT).show();
                }
        }
        @Override
        public void afterTextChanged(Editable s) {
```

```
                String name=edSearch.getText().toString();
Cursor cur=db.rawQuery("select * from Friends where name LIKE '"+name+"%'",null);
                if(cur.getCount()>=1)            {
                        cur.moveToNext();
                        edname.setText(cur.getString(1)+"");
                        edage.setText(cur.getInt(2)+"");
                        edphone.setText(cur.getString(3)+"");
        }              else          {                      clearField();           }        }
        private void clearField()      {
                edname.setText("");
                edage.setText("");
                edphone.setText("");
        }
}
```

File Name : Insert.java

```
package ps.dboperation;
import android.app.Activity;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.*;
import android.widget.*;
public class insert extends Activity implements OnClickListener
{
        EditText edname,edage,edphone;
        Button btadd,btclear;
        SQLiteDatabase db;

        @Override
        protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
                setContentView(R.layout.insert);
db=openOrCreateDatabase("Master", SQLiteDatabase.CREATE_IF_NECESSARY, null);
                edname=(EditText) findViewById(R.id.editTextname);
                edage=(EditText) findViewById(R.id.editTextageins);
                edphone=(EditText) findViewById(R.id.editTextphoneins);
                btadd=(Button) findViewById(R.id.buttonaddins);
                btclear=(Button) findViewById(R.id.buttonclear);
                btadd.setOnClickListener(this);
                btclear.setOnClickListener(this);
        }
        @Override
        public void onClick(View v) {
                // TODO Auto-generated method stub
                if(v.getId()==btadd.getId())        {
                        String name=edname.getText().toString();
                        int age=Integer.parseInt(edage.getText().toString());
                        String phone=edphone.getText().toString();
```

```
db.execSQL("insert into Friends(name,age,phone) values('"+name+"','"+age+"','"+phone+"')");
edname.setText("");            edage.setText("");                    edphone.setText("");
Toast.makeText(this, "Record Insert Success...", Toast.LENGTH_SHORT).show();
}
else if(v.getId()==btclear.getId()){
edname.setText("");                    edage.setText("");            edphone.setText("");
Toast.makeText(this, "Field Cleared...", Toast.LENGTH_SHORT).show();
}         }         }
```

File Name : Update.java

```
package ps.dboperation;
import android.app.Activity;
import android.database.*;
import android.os.Bundle;
import android.text.*;
import android.view.*;
import android.widget.*;
public class update extends Activity implements OnClickListener, TextWatcher {
        EditText edname,edage,edphone,edSearch;
        Button btedit,btclear;
        String setname;
        SQLiteDatabase db;
        @Override
        protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
                setContentView(R.layout.update);
db=openOrCreateDatabase("Master", SQLiteDatabase.CREATE_IF_NECESSARY, null);
                edSearch=(EditText) findViewById(R.id.editTextsearch);
                edname=(EditText) findViewById(R.id.editTextnameupdt);
                edage=(EditText) findViewById(R.id.editTextageupdt);
                edphone=(EditText) findViewById(R.id.editTextphoneupdt);
                btedit=(Button) findViewById(R.id.buttoneditupdt);
                btclear=(Button) findViewById(R.id.buttonclearupdt);
                edname.setEnabled(false);
                edage.setEnabled(false);
                edphone.setEnabled(false);
                btedit.setOnClickListener(this);
                btclear.setOnClickListener(this);
                edSearch.addTextChangedListener(this);
        }
        @Override
        public void onClick(View v) {
                Button action=(Button) v;
                if(action.getText().toString().equals("Edit"))            {
                        toggelEnable();

                        edSearch.setFocusable(false);
                        edname.setFocusable(true);
```

```
                setname=edname.getText().toString();
                btedit.setText("Save");
        }
        else if(action.getText().toString().equals("Save"))
        {
                String name=edname.getText().toString();
                int age=Integer.parseInt(edage.getText().toString());
                String phone=edphone.getText().toString();
db.execSQL("update Friends set name='"+name+"', age="+age+", phone='"+phone+"' where
name='"+setname+"';");
Toast.makeText(this, "Record Update Success...", Toast.LENGTH_SHORT).show();
        }
    }
    @Override
    public void afterTextChanged(Editable s) {
    String name=edSearch.getText().toString();
Cursor cur=db.rawQuery("select * from Friends where name LIKE '"+name+"%'",null);
        if(cur.getCount()>=1)            {
                cur.moveToNext();
                edname.setText(cur.getString(1)+"");
                edage.setText(cur.getInt(2)+"");
                edphone.setText(cur.getString(3)+"");
        }       }
```

File Name: view.java

```
package ps.dboperation;
import android.app.Activity;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.widget.*;
public class view extends Activity
{
        ListView lvrecords;
        SQLiteDatabase db;
        @Override
        protected void onCreate(Bundle savedInstanceState) {
                super.onCreate(savedInstanceState);
                setContentView(R.layout.view);
    db=openOrCreateDatabase("Master", SQLiteDatabase.CREATE_IF_NECESSARY, null);
                lvrecords=(ListView) findViewById(R.id.listViewrecords);
                Cursor cur=db.rawQuery("select * from Friends", null);
                String records[];
                int len=cur.getCount();
                Toast.makeText(this,"len : "+len, Toast.LENGTH_SHORT).show();
                records=new String[len];
                cur.moveToFirst();
                for(int i=0;i<len;i++)              {
                        records[i]=cur.getString(1)+"|"+cur.getString(2)+"|"+cur.getString(3);
```

```
            cur.moveToNext();
        }
        ArrayAdapter<String> arr=new
ArrayAdapter<String>(this,android.R.layout.simple_list_item_1,records);
        lvrecords.setAdapter(arr);
    }
    catch(Exception e)
    {
        Toast.makeText(this, e.toString(), Toast.LENGTH_SHORT).show();
    }
    }
}
```
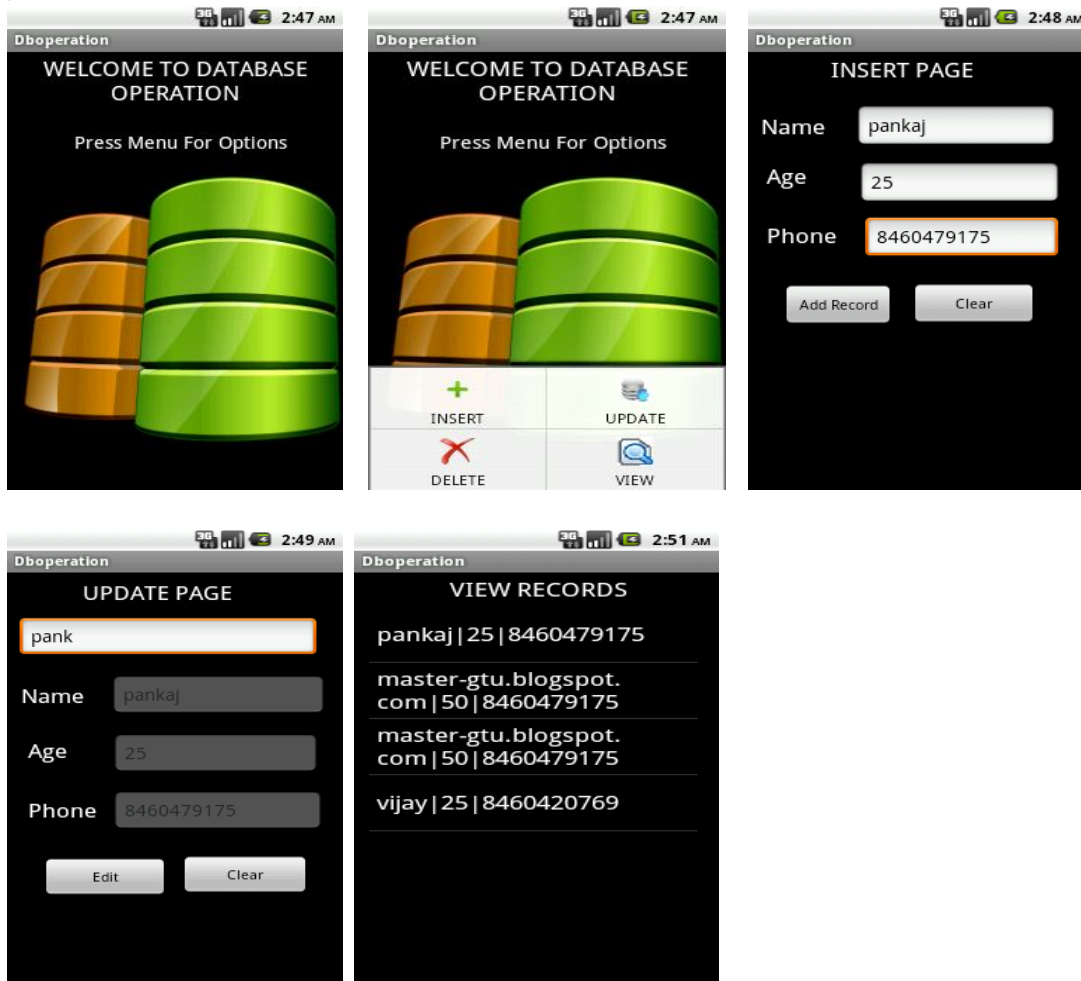

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