*//Движение кнопки по экрану + POPUP MENU***package** tva.knastu.com.lab\_2\_3;  
  
**import** android.graphics.Color;  
**import** android.graphics.drawable.ColorDrawable;  
**import** android.support.constraint.ConstraintLayout;  
**import** android.support.v7.app.ActionBar;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.support.v7.widget.PopupMenu;  
**import** android.support.v7.widget.Toolbar;  
**import** android.util.Log;  
**import** android.view.ContextMenu;  
**import** android.view.Menu;  
**import** android.view.MenuInflater;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
  
**public class** MainActivity **extends** AppCompatActivity **implements** PopupMenu.OnMenuItemClickListener {  
 **private static final** String ***TAG*** = **"my\_tag"**;  
 Button **b1**, **b2**;  
 TextView **txt**;  
 **final int ITEM\_SIZE\_22** = 22;  
 **final int ITEM\_SIZE\_24** = 24;  
 **final int ITEM\_SIZE\_26** = 26;  
 **final int ITEM\_CANCEL** = 0;  
  
  
 ConstraintLayout.LayoutParams **params**;  
 **int X**, **Y**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate( savedInstanceState );  
 setContentView( R.layout.***activity\_main*** );  
  
 *//ActionBar bar = getSupportActionBar();  
 //bar.hide();* Toolbar toolbar = (Toolbar) findViewById(R.id.***toolbar***);  
 setSupportActionBar(toolbar);  
 toolbar.setNavigationIcon(android.R.drawable.***ic\_menu\_help*** );  
 toolbar.setLogo( R.mipmap.***ic\_launcher*** );  
  
 **txt** = (TextView) findViewById(R.id.***textView***);  
 registerForContextMenu(**txt**);  
  
  
 **b1** = (Button) findViewById(R.id.***b1***);  
 **b2** = (Button) findViewById(R.id.***b2***);  
  
 **params** = (ConstraintLayout.LayoutParams) **b1**.getLayoutParams();  
 **X** = **params**.**leftMargin**; **Y**=**params**.**topMargin**;  
 }  
  
 */\*\*  
 \* Метод, вызывающийся при построении контекстного меню  
 \*/* @Override  
 **public void** onCreateContextMenu(ContextMenu menu, View v,  
 ContextMenu.ContextMenuInfo menuInfo) {  
 menu.setHeaderTitle(**"Выберите размер шрифта"**);  
 menu.add(0, **ITEM\_SIZE\_22**, 0, **"22"**);  
 menu.add(0, **ITEM\_SIZE\_24**, 0, **"24"**);  
 menu.add(0, **ITEM\_SIZE\_26**, 0, **"26"**);  
 menu.add(0, **ITEM\_CANCEL**, 0, **"Cancel"**);  
 }  
  
 */\*\*  
 \* Метод, осуществляющий обработку выбора пункта меню  
 \*/* @Override  
 **public boolean** onContextItemSelected(MenuItem item) {  
 **switch** (item.getItemId()) {  
 **case ITEM\_SIZE\_22**:  
 **txt**.setTextSize(22);  
 **txt**.setText(**"Размер текста 22"**);  
 **break**;  
 **case ITEM\_SIZE\_24**:  
 **txt**.setTextSize(24);  
 **txt**.setText(**"Размер текста 24"**);  
 **break**;  
 **case ITEM\_SIZE\_26**:  
 **txt**.setTextSize(26);  
 **txt**.setText(**"Размер текста 26"**);  
 **break**;  
 **case ITEM\_CANCEL**:  
 closeContextMenu();  
 **break**;  
 }  
  
 **return true**;  
 }  
  
  
  
  
 @Override  
 **public boolean** onCreateOptionsMenu(Menu menu) {  
 getMenuInflater().inflate(R.menu.***menu***, menu);  
 **return true**;  
 }  
  
 @Override  
 **public boolean** onOptionsItemSelected(MenuItem item) {  
  
 **int** id = item.getItemId();  
 **if** (id == R.id.***item1***) {  
 **return true**;  
 }  
 **return super**.onOptionsItemSelected(item);  
 }  
  
  
 **public void** onClick(View view) {  
 **X**+=10; **Y**+=10;  
 **params**.**leftMargin** = **X**;  
 **params**.**topMargin** = **Y**;  
 **b1**.setLayoutParams(**params**);  
 Log.*d*(***TAG***, **"priceY = "** + **Y**);  
 }  
  
 **public void** showPopup(View v) {  
 PopupMenu popup = **new** PopupMenu(**this**, v);  
 popup.setOnMenuItemClickListener(MainActivity.**this**);  
 MenuInflater inflater = popup.getMenuInflater();  
 inflater.inflate(R.menu.***menu***, popup.getMenu());  
 popup.show();  
 }  
  
  
 **public boolean** onMenuItemClick(MenuItem item) {  
 **switch** (item.getItemId()) {  
 **case** R.id.***item1***:  
 Toast.*makeText*(**this**, **"Выбран пункт 1"**, Toast.***LENGTH\_SHORT***).show();  
 **return true**;  
 **case** R.id.***item2***:  
 Toast.*makeText*(**this**, **"Выбран пункт 2"**, Toast.***LENGTH\_SHORT***).show();  
 **return true**;  
 **case** R.id.***item3***:  
 Toast.*makeText*(**this**, **"Выбран пункт 3"**, Toast.***LENGTH\_SHORT***).show();  
 **return true**;  
 }  
 **return true**;  
 }  
  
  
  
  
  
}