```
using PreviousPaper1.Models;
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;
namespace PreviousPaper1.Controllers
{
 public class ProductsController : Controller
 {
   // GET: Products
   public ActionResult Index()
   {
     List<Product> prod = Product.GetAllProducts();
     return View(prod);
   }
   // GET: Products/Details/5
   public ActionResult Details(int id)
   {
     Product obj = Product.GetProductById(id);
     return View(obj);
   }
   // GET: Products/Create
```

```
public ActionResult Create()
{
  return View();
}
// POST: Products/Create
[HttpPost]
public ActionResult Create(FormCollection collection)
{
  try
  {
    // TODO: Add insert logic here
    return RedirectToAction("Index");
  }
  catch
  {
    return View();
  }
}
// GET: Products/Edit/5
public ActionResult Edit(int id)
  Product product = Product.GetProductById(id);
  List<Category> cata = Category.GetAllCatogories();
  List<SelectListItem> catalist = new List<SelectListItem>();
```

```
foreach (var item in cata)
      {
        catalist.Add(new SelectListItem { Text = item.CategoryName, Value =
item.CategoryId.ToString() });
      }
      ViewBag.Categories = catalist;
      return View(product);
    }
    // POST: Products/Edit/5
    [HttpPost]
    public ActionResult Edit(int id, Product obj)
    {
      try
      {
        Product.UpdateProduct(obj);
        return RedirectToAction("Index");
      }
      catch
      {
        return View();
      }
    }
```

```
// GET: Products/Delete/5
public ActionResult Delete(int id)
  return View();
}
// POST: Products/Delete/5
[HttpPost]
public ActionResult Delete(int id, FormCollection collection)
  try
  {
    // TODO: Add delete logic here
    return RedirectToAction("Index");
  }
  catch
    return View();
  }
}
[ChildActionOnly]
public ActionResult MyPartialView()
  return View();
}
```

```
}
using System;
using System.Collections.Generic;
using System.ComponentModel.DataAnnotations;
using System.Data.SqlClient;
using System.Linq;
using System.Web;
using System.Web.Mvc;
namespace PreviousPaper1.Models
{
  public class Product
  {
    [Display(Name = "Product Id")]
    [Required(ErrorMessage = "Please Enter Product Id")]
    public int ProductId { get; set; }
    [Display(Name ="Product Name")]
    public string ProductName { get; set; }
    [DataType(DataType.Currency)]
    public decimal Rate { get; set; }
    public string Description { get; set; }
```

}

```
[Display(Name = "Category Id")]
             [ScaffoldColumn(false)]
             public int CategoryId { get; set; }
             [Display(Name = "Category Name")]
             public string CategoryName { get; set; }
           /* public IEnumerable<SelectListItem> Categories { get; set; }
*/
             public static Product GetProductById(int id)
                    Product obj = new Product();
                    SqlConnection cn = new SqlConnection();
                   cn.ConnectionString = @"Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=JKJuly2022;Integrated Security=True;Connect
Timeout=30; Encrypt=False; Trust Server Certificate=False; Application Intent=Read Write; Multi Subnet False; Application Intent=Read Write; Appl
ilover=False";
                   try
                   {
                          cn.Open();
                          SqlCommand cmdSelect = new SqlCommand();
                          cmdSelect.Connection = cn;
                          cmdSelect.CommandType = System.Data.CommandType.Text;
                          cmdSelect.CommandText = "select * from Products where ProductId=@ProductId";
                          cmdSelect.Parameters.AddWithValue("@ProductId", id);
                          SqlDataReader dr = cmdSelect.ExecuteReader();
                          while (dr.Read())
```

```
{
                                              obj = new Product { ProductId = (int)dr["ProductId"], ProductName =
(string)dr["ProductName"], Rate = (decimal)dr["Rate"], Description = (string)dr["Description"],
CategoryId = (int)dr["CategoryId"] };
                                     }
                                     dr.Close();
                           }
                           catch
                           {
                           }
                           finally
                           {
                                     cn.Close();
                           }
                           return obj;
                  }
                  public static void UpdateProduct(Product obj)
                  {
                           SqlConnection cn = new SqlConnection();
                           cn.ConnectionString = @"Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=JKJuly2022;Integrated Security=True;Connect
Timeout = 30; Encrypt = False; Trust Server Certificate = False; Application Intent = Read Write; Multi Subnet False; Application Intent = Read Write; 
ilover=False";
                    // try
                      // {
```

```
cn.Open();
        SqlCommand cmdSelect = new SqlCommand();
        cmdSelect.Connection = cn;
        cmdSelect.CommandType = System.Data.CommandType.Text;
        cmdSelect.CommandText = "update Products set
ProductName=@ProductName,Rate=@Rate,Description=@Description,CategoryId=CategoryId
where ProductId=@ProductId";
        cmdSelect.Parameters.AddWithValue("@ProductId", obj.ProductId);
        cmdSelect.Parameters.AddWithValue("@ProductName", obj.ProductName);
        cmdSelect.Parameters.AddWithValue("@Rate", obj.Rate);
        cmdSelect.Parameters.AddWithValue("@Description", obj.Description);
        cmdSelect.Parameters.AddWithValue("@CategoryId", obj.CategoryId);
        cmdSelect.ExecuteNonQuery();
     // }
     // catch
     // {
     //}
     // finally
     // {
        cn.Close();
```

```
//}
             }
             public static List<Product> GetAllProducts()
             {
                    List<Product> prod = new List<Product>();
                    SqlConnection cn = new SqlConnection();
                   cn.ConnectionString = @"Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=JKJuly2022;Integrated Security=True;Connect
Timeout=30; Encrypt=False; Trust Server Certificate=False; Application Intent=Read Write; Multi Subnet False; Application Intent=Read Write; Appl
ilover=False";
                   try
                   {
                           cn.Open();
                           SqlCommand cmdSelect = new SqlCommand();
                           cmdSelect.Connection = cn;
                           cmdSelect.CommandType = System.Data.CommandType.StoredProcedure;
                           cmdSelect.CommandText = "SelectAllProducts";
                           SqlDataReader dr = cmdSelect.ExecuteReader();
                           while (dr.Read())
                          {
                                 prod.Add(new Product { ProductId = (int)dr["ProductId"], ProductName =
(string)dr["ProductName"], Rate = (decimal)dr["Rate"], Description = (string)dr["Description"],
CategoryId = (int)dr["CategoryId"], CategoryName = (string)dr["CategoryName"] });
                          }
                           dr.Close();
```

```
}
      catch
      {
      }
      finally
      {
        cn.Close();
      }
      return prod;
   }
 }
===Category.cs==========
using System;
using System.Collections.Generic;
using\ System. Component Model. Data Annotations;
using System.Data.SqlClient;
using System.Linq;
using System.Web;
namespace PreviousPaper1.Models
{
  public class Category
  {
```

```
public int CategoryId { get; set; }
              [Display(Name = "Category Name")]
              public string CategoryName { get; set; }
              public static List<Category> GetAllCatogories()
             {
                     List<Category> cat = new List<Category>();
                     SqlConnection cn = new SqlConnection();
                     cn.ConnectionString = @"Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=JKJuly2022;Integrated Security=True;Connect
Timeout=30; Encrypt=False; Trust Server Certificate=False; Application Intent=Read Write; Multi Subnet False; Application Intent=Read Write; Appl
ilover=False";
                    try
                    {
                            cn.Open();
                            SqlCommand cmdSelect = new SqlCommand();
                            cmdSelect.Connection = cn;
                            cmdSelect.CommandType = System.Data.CommandType.Text;
                            cmdSelect.CommandText = "select * from Categories";
                            SqlDataReader dr = cmdSelect.ExecuteReader();
                            while (dr.Read())
                           {
                                   cat.Add(new Category { CategoryId = (int)dr["CategoryId"], CategoryName =
(string)dr["CategoryName"] });
                           }
                            dr.Close();
```

```
catch
{

finally
{
    cn.Close();
}
    return cat;
}
```

@Html.DropDownListFor(model => model.CategoryName, (IEnumerable<SelectListItem>)ViewBag.Categories)