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Code:

**Interface iFan**

public interface iFan

{

void on();

void off();

}

**Class ExhaustFan**

class ExhaustFan : iFan

{

public void on()

{

Console.WriteLine("Exhaust fan is ON");

}

public void off()

{

Console.WriteLine("Exhaust fan is off");

}

}

**Class CeilingFan**

class ceilingFan : iFan

{

public void on()

{

Console.WriteLine("ceiling fan is ON");

}

public void off()

{

Console.WriteLine("ceiling fan is off");

}

}

**Class TableFan**

class TableFan : iFan

{

public void on()

{

Console.WriteLine("Table fan is ON");

}

public void off()

{

Console.WriteLine("Table fan is off");

}

}

**Class Fan\_Factory**

public class Fan\_Factory

{

iFan fan;

public iFan makefan(string fanType)

{

if(fanType == "ceiling")

{

fan = new ceilingFan();

return fan;

}

if(fanType == "exhaust")

{

fan = new ExhaustFan();

return fan;

}

if(fanType == "table")

{

fan = new TableFan();

return fan;

}

return null;

}

}

**Main Method**

static void Main(string[] args)

{

iFan fan;

string fanType = "";

Console.Write("which fan do you want to buy ?\n1) Table fan\n2) Ceiling

Fan\n3) Exhaust Fan\n\tSelect any One : ");

int opt = int.Parse(Console.ReadLine());

switch (opt)

{

case 1:

fanType = "table";

break;

case 2:

fanType = "ceiling";

break;

case 3:

fanType = "exhaust";

break;

default:

Console.WriteLine("You press wrong key try again\n\n");

System.Environment.Exit(0);

break;

}

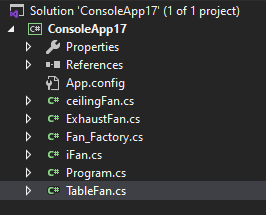
Fan\_Factory buy = new Fan\_Factory();

fan = buy.makefan(fanType);

fan.on();

fan.off();

}



Output:

