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Task

You are tasked with writing a C# program that models a clothing store inventory system, where different types of clothing are categorized by gender and age group. Write the solution within the Program.cs file.

Requirements

The program should have the following classes:

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1. Cloth Class

- Create a public class called **Cloth**.
- A base class with an **ID** property that uniquely identifies each clothing item.
- A constructor that initializes the ID.

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2. Women Class

- Create a public class called **Women**.
- Inherits from the **Cloth** class and has properties **size**, **materialType**, and **return_cloth** (defaulted to `"YES"`).
- A constructor that initializes the ID, size, and materialType properties.
- A **DisplayInfo()** method that outputs the cloth details, including ID, size, materialType, and the return policy.

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3. Men Class

- Create a public class called **Men**.
- Inherits from the **Cloth** class and has properties **size** and **return_cloth** (defaulted to `"YES"`).
- A constructor that initializes the ID and size properties.

- A **DisplayInfo()** method that outputs the cloth details, including ID, size, and the return policy.

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4. Kids Class

- Create a public class called **Kids**.
- Inherits from the **Cloth** class and has properties **size** and **return_cloth** (defaulted to `"NO"`).
- A constructor that initializes the ID and size properties.
- A **DisplayInfo()** method that outputs the cloth details, including ID, size, and the return policy.

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5. Program Class

- Contains the **Main** method where the user is prompted to input details for various clothing items.
- The user provides:
  - the **ID and size** for men's clothing item,
  - the **ID, size, and material type** for women's clothing item,
  - the **ID and size** for a kid's clothing item.
- The program then creates instances of **Men**, **Women**, and **Kids** classes based on the input data.
- Finally, the program should display the information for each clothing item, including the return policy specific to each category.

Input Format

- First line consists of **Men Cloth ID**
- Second line consists of **Size**
- Third line consists of **Women Cloth ID**
- Fourth line consists of **Size**
- Fifth line consists of **Material type**
- Sixth line consists of **Kids Cloth ID**
- Seventh line consists of **Size**

Output Format

Refer to the sample output. The display should be the same with spaces and special characters.

Sample Input 1

```
101
44
102
30
Cotton
103
8
```

Sample Output 1

```
MEN ID: 101
Size: 44
Return Option within a Week: YES
Women Cloth ID: 102
Size: 30
Material Type: Cotton
Return Option within a Week: YES
KID Cloth ID: 103
Size: 8
Return Option: NO
```

Sample Input 2

```
222
42
332
34
Silk
333
12
```

Sample Output 2

```
MEN ID: 222
Size: 42
Return Option within a Week: YES
Women Cloth ID: 332
Size: 34
Material Type: Silk
Return Option within a Week: YES
KID Cloth ID: 333
```

```
Size: 12
Return Option: NO
```

Commands to Run the Project

```
cd dotnetapp
dotnet run
dotnet build
dotnet clean
```

Note

The project will not be submitted if **'Submit Project'** is not done at least once.

Answer:

```
class Cloth
{
   protected int id;

   public Cloth(int id)
   {
      this.id = id;
   }
}
class Men:Cloth
{
   int size;

   string returnCloth="YES";
   public Men(int id,int size):base(id)
```

```
    {
        this.size = size;
    }
    public void DisplayInfo()
    {
        Console.WriteLine("\nMen Cloth Details: ");
        Console.WriteLine("Cloth ID: "+id);
        Console.WriteLine("Cloth size: "+size);
        Console.WriteLine("ReturnCloth: "+returnCloth);
    }
}
class Women:Cloth
{
    int size;
    string materialType = "";
    string returnCloth= "YES";

    public Women(int id,int size,string materialType):base(id)
    {
        this.size=size;
        this.materialType=materialType;
    }
    public void DisplayInfo()
    {
        Console.WriteLine("\nWomen Cloth Details: ");
```

```
        Console.WriteLine("Cloth ID: "+id);
        Console.WriteLine("Cloth size: "+size);
        Console.WriteLine("Material Type: "+materialType);
        Console.WriteLine("ReturnCloth: "+returnCloth);
    }
}
class Men:Cloth
{
    int size;

    string returnCloth="YES";
    public Men(int id,int size):base(id)
    {
        this.size = size;
    }
    public void DisplayInfo()
    {
        Console.WriteLine("\nMen Cloth Details: ");
        Console.WriteLine("Cloth ID: "+id);
        Console.WriteLine("Cloth size: "+size);
        Console.WriteLine("ReturnCloth: "+returnCloth);
    }
}
class Kids : Cloth
{
```

```
    int size;
    string returnCloth="NO";
    public Kids(int id,int size):base(id)
    {
        this.size=size;
    }
    public void DisplayInfo()
    {
        Console.WriteLine("\nKids Cloth Details: ");
        Console.WriteLine("Cloth ID: "+id);
        Console.WriteLine("Cloth size: "+size);
        Console.WriteLine("ReturnCloth: "+returnCloth);
    }
}
```