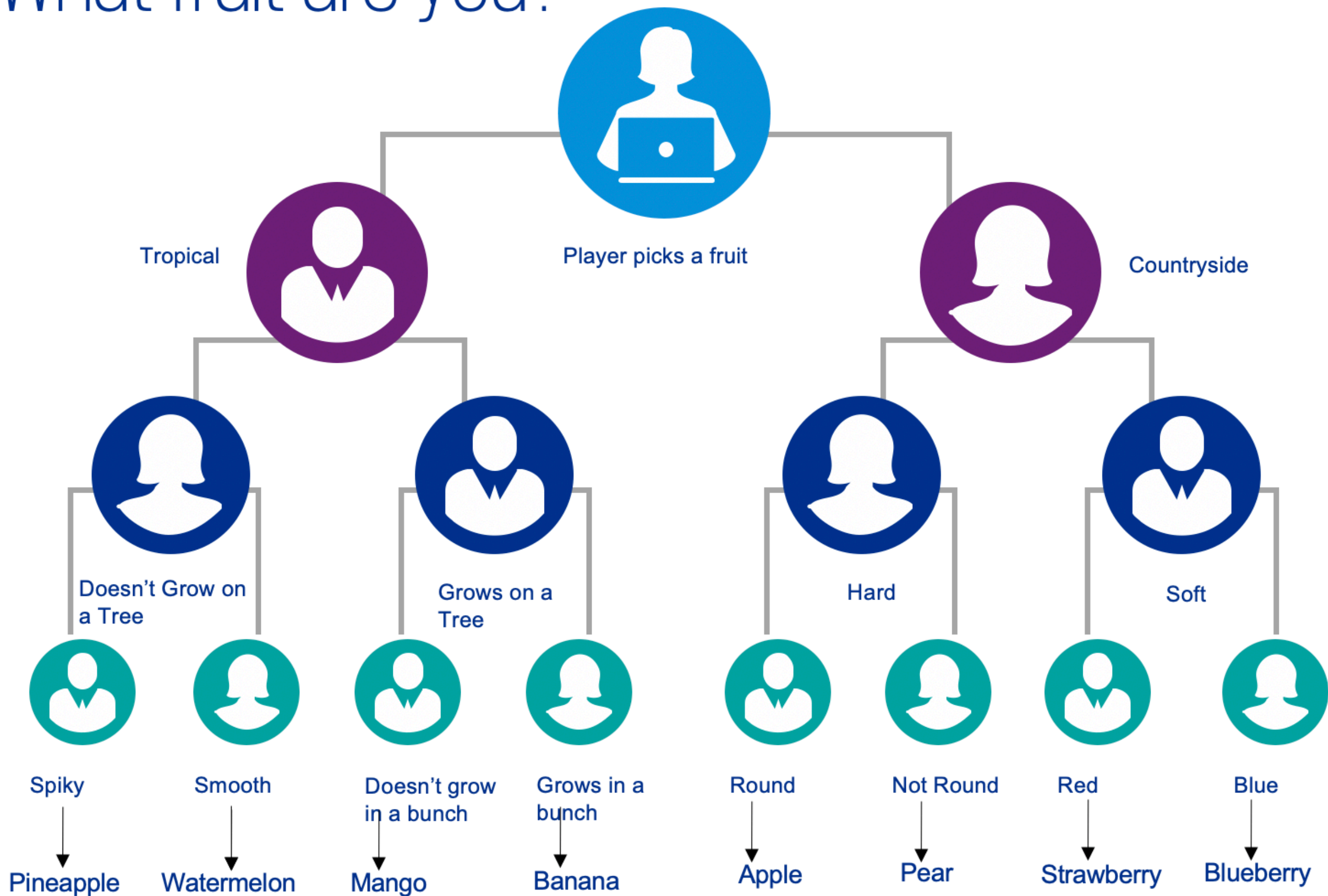


**GUESS THE FRUIT**

# What fruit are you?



**WHAT'S PROGRAMMING?**

**WHAT'S PYTHON?**

**WHO USES IT?**

**TEXT EDITOR**

**TRINKET.10**

**HELLO, WORLD!**



# HELLO, WORLD!

```
print("Hello, World!")
```

**LINK 1**

# VARIABLES

# VARIABLES

```
<variable_name> = <value>
```

# VARIABLES

```
name = "Charlie"  
age = 27  
left_to_pay = 29.99  
has_paid = False
```

# VARIABLES

- ▶ Any mix of letters, numbers and some special characters
  - ▶ Must start with a letter
  - ▶ Keep lowercase
- ▶ Use underscore where there are spaces

# WRITING PYTHON

- ▶ You are not writing an essay...
  - ▶ Keep things lowercase
  - ▶ Don't use punctuation
- ▶ Replace spaces with underscores

# DATA TYPES



**STRINGS**

# STRINGS

Characters surrounded by quotes

```
name = "Alice"  
address = "123 Station Road"  
favourite_food = "Pizza"
```

**ESCAPING**

# ESCAPING

`\n` = New line

`\t` = Tab

`\"` = Double Quote

# ESCAPING

```
favourite_food = "Pizza from \"Dough N' Sauce\""  
shopping_list = "Apples\nBread\nMilk\nEggs"
```

**LINK 2**

**INTEGER**

# INTEGER

A whole number

```
age = 17
```

```
days_in_january = 31
```

```
bottles_sitting_on_the_wall = 99
```



# FLOAT

# FLOAT

A decimal number

```
price = 12.99  
percent = 34.57  
pi = 3.1415
```

# NUMERICAL OPERATORS

# NUMERICAL OPERATORS

OPERATOR	ACTION	EXAMPLE
+	Addition	1 + 2
-	Subtraction	3 - 1
*	Multiplication	3 * 7
/	Division	9 / 3
**	Exponent	4 ** 2
%	Modulus (remainder)	10 % 3

# NUMERICAL OPERATORS

```
print(1 + 2)
print(5 - 3)
print(3 * 7)
print(49 / 7)
print(4 ** 2)
print(10 % 3)
```

# NUMERICAL OPERATORS

x = 3

y = 6

area = x \* y

**LINK 3**

**CONCATENATION**



# CONCATENATION

```
first_name = "Bob"  
last_name = "Jones"  
full_name = first_name + " " + last_name  
  
print("Hello " + first_name)  
print("Good morning, " + full_name)
```

**LINK 4**

**CASTING**

# CASTING – INTEGERS

```
x = int(1)    # x will be 1  
y = int(2.6)  # y will be 2  
z = int("3")  # z will be 3
```

# CASTING – FLOATS

```
w = float(4)      # w will be 4.0
x = float(5.6)    # x will be 5.6
y = float("6")    # y will be 6.0
z = float("7.3")  # z will be 7.3
```

# CASTING – STRINGS

```
x = str("abc8") # x will be 'abc8'  
y = str(9)      # y will be '9'  
z = str(10.0)   # z will be '10.0'
```

# CASTING

```
age = 21
```

```
# ERROR: TypeError: can only concatenate str (not "int") to str  
print("You are: " + age + " years old")
```

# CASTING

```
age = 21
```

```
# Cast the age integer to a string
```

```
print("You are: " + str(age) + " years old")
```



# CASTING

```
total = 79.99
```

```
# Cast the total float to string
```

```
print("Your order total is:" + str(total))
```

**LENGTH**

# LENGTH

```
name = "Alice"
```

```
name_length = len(name) # 5
```

```
sentence_length = len("Hello, World!") #13
```

**UPPER/LOWER**

# UPPER/LOWER

```
name = "Alice"  
print(name.upper()) # ALICE  
  
print("HeLlO".lower()) # hello
```

**LINK 5**

**INPUT**

# INPUT

```
name = input("What's your name? ")  
  
print("Hello " + name)
```



**LINK 6**

# CONDITIONALS

IF

# IF

```
total = 1 + 2
```

```
if total == 3:  
    print("This message is always shown")
```

**ELSE**

# ELSE

```
total = 2 + 3
```

```
if total == 3:  
    print("This message is NOT shown")  
else:  
    print("This message is shown")
```

# ELSE

```
age = 16
```

```
if age >= 18:
```

```
    print("You can vote")
```

```
else:
```

```
    print("You're not old enough to vote")
```

**LINK 7**



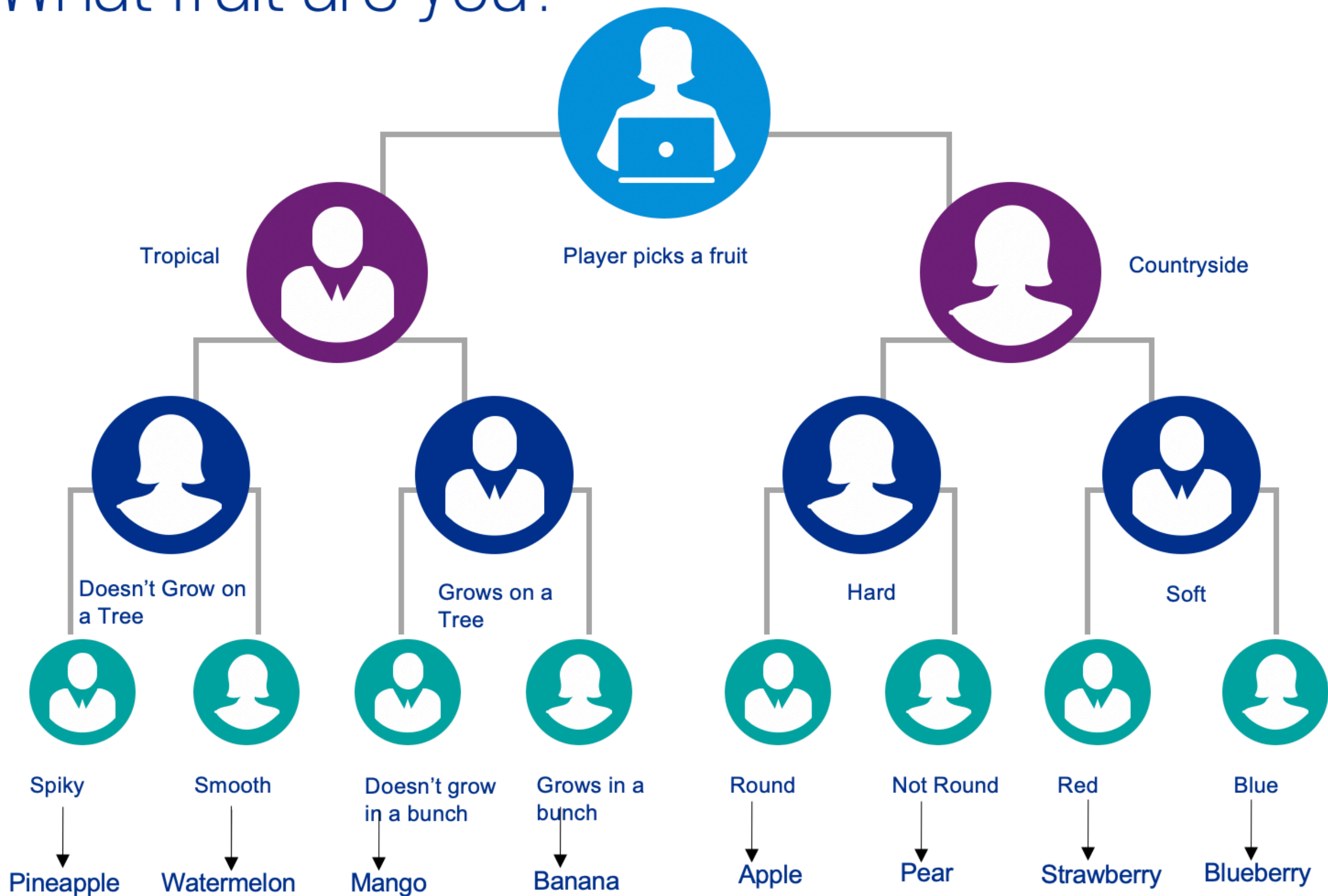
# ELSE

```
is_tropical = input("Is the fruit tropical?")

if is_tropical == "yes":
    is_tree = input("Does the fruit grow on a tree?")
    if is_tree == "yes":
        print("You picked a tropical fruit that grows on a tree")
    else:
        print("You picked a tropical fruit that doesn't grow on a tree")
else:
    print("You picked a countryside fruit")
```

**LINK 8**

# What fruit are you?



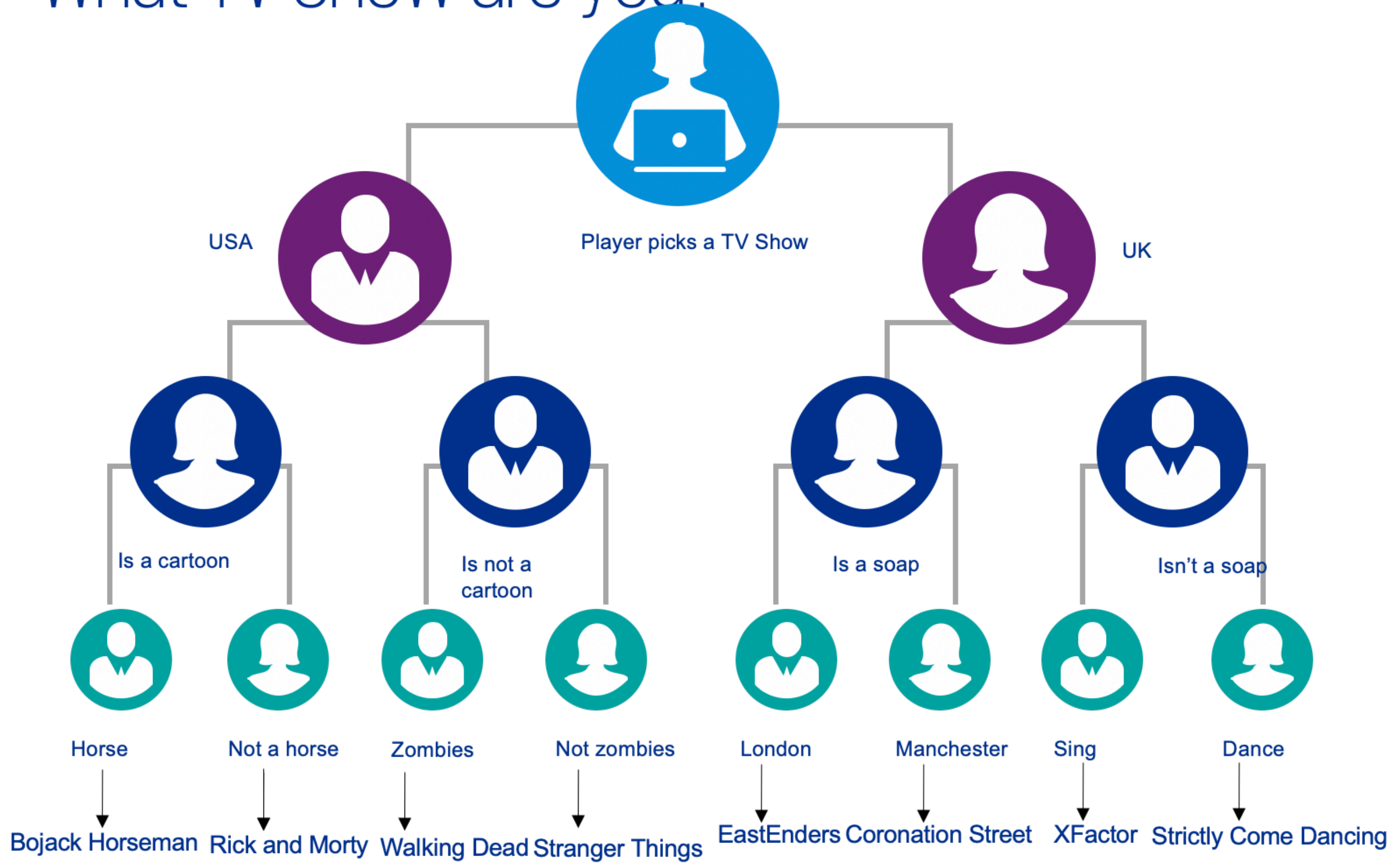
**GUESS THE FRUIT**

**LINK 9**

# YOUR GAME

- ▶ **Animals**
- ▶ **Celebrities**
- ▶ **TV Show**
- ▶ **Food**
- ▶ **Music**

# What TV Show are you?



**THANKS :) )**