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Lesson 3: Hit the jukebox!

Select your artist

Learning objectives

Know how through youth activism, young people can stand up to racism

Know different selection statements that can be used and how these can be planned depending on the pathways needed in a program

Code a simple jukebox program that enables the user to select the music they wish to hear

Combine the use of selection and lists to develop algorithms using list indexes to select items

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Making decisions

- Through youth activism, young people are standing up against racism and advocating social justice

- They participate in movements like Black Lives Matter and use social media to mobilise their peers

- Such activism reflects their commitment to equality and influences their decision-making process

Activity (pairs)

Discuss what decisions you have taken or actions you have seen where young people speak out in support of social justice.

What influence might affect standing up or speaking out?

Can music help influence others?

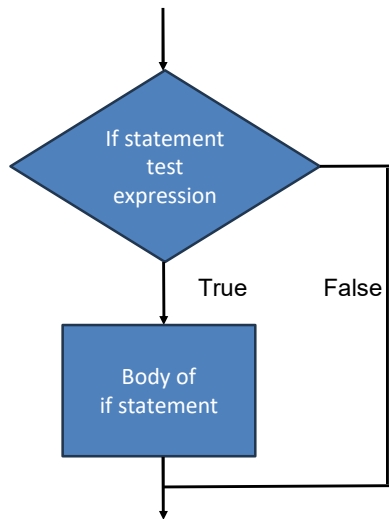amazon future engineer

Choose your sound

- So far you've been sequencing your code to play sounds in the order of your choice

- Using selection in the form of if statements, it's possible to allow the user of your EarSketch program to make choices

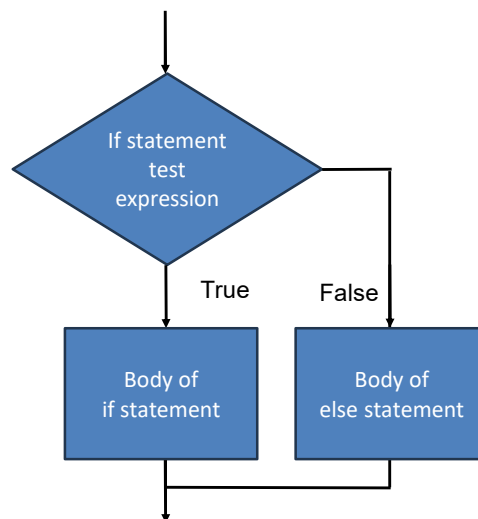- This can be achieved using input() statements as previously used when setting the temp…
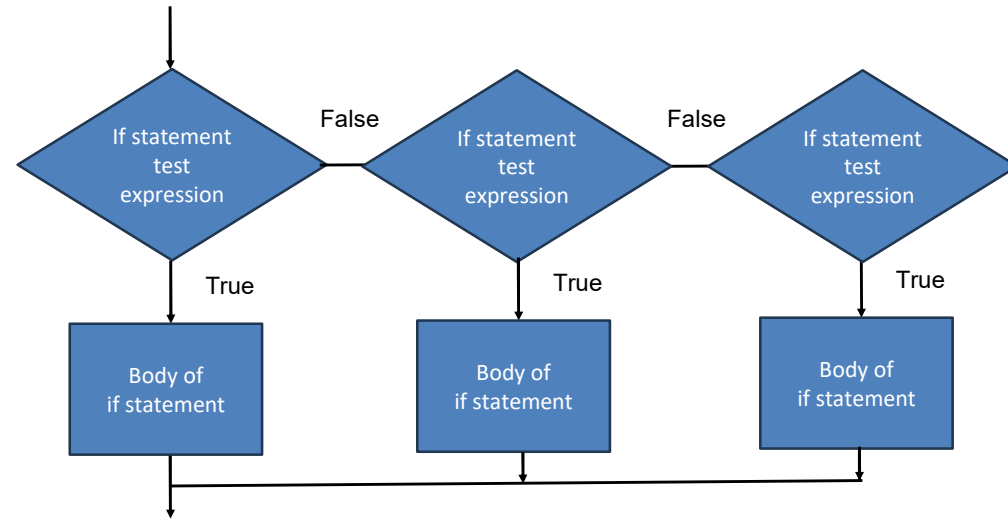
Creating branches in programs with if, elif and else

If

If, else

If, elif, else

If statement test expression	
	True · False
Body of if statement	

If statement test expression	
True · False	
Body of if statement · Body of else statement	

If statement test expression — False — If statement test expression — False — If statement test expression

True · True · True

Body of if statement · Body of if statement · Body of if statement

Pick a beat from the box

If

```
answer = input('What is the name of the lar
gest mammal? ')
if answer == 'blue whale':
    print('Correct, nice work!')
```

If, else

```
answer = input('What is the name of the largest mammal? ')
if answer == 'blue whale':
    print('Correct, nice work!')
else:
    print('Incorrect, better luck next time!')
```

If, elif, else

```
valueA = int(input("Enter a number: "))
valueB = int(input("Enter a number: "))
if valueA > valueB:
    print("The first number is bigger than the second n
umber")
elif valueA < valueB:
    print("The second number is bigger than the first n
umber")
else valueA == valueB:
    print("Both numbers are the same"
```

Pick a beat from the box

Previously the beat was played by naming the object as one of the parameters:

ciara_drum = CIARA_SET_DRUMBEAT_1

pharell_drum = ENTREP_BEAT_DRUMBEAT

khalid_drum = KHALID_NORM_DRUMBEAT

alicia_drum = AK_UNDOG_STEEL_DRUMS

Activity (pairs)

Partner A:

Describe this line by line to your partner

Partner B:

Summarise the code in only two sentences

Individually:

Code your own jukebox using your own sample selections

```
artist = input("Name artist: ")
if artist == "Ciara":
    fitMedia(ciara_drum, 1, 1, 8)
elif artist == "Pharrell":
    fitMedia(pharell_drum, 1, 1, 8)
elif artist == "Khalid":
    fitMedia(khalid_drum, 1, 1, 8)
elif artist == "Alicia":
    fitMedia(alicia_drum, 1, 1, 8)
else:
    print("Sorry that is not an available artist ")
```

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Pick a beat from the box

```
ciara_drum = CIARA_SET_DRUMBEAT_1
pharrell_drum =
ENTREP_BEAT_DRUMBEAT
khalid_drum =
KHALID_NORM_DRUMBEAT
alicia_drum =
AK_UNDOG_STEEL_DRUMS

drum_list = [ciara_drum, pharrell_drum,
khalid_drum, alicia_drum]

artist = input("Name artist: ")
if artist == "Ciara":
    fitMedia(ciara_drum, 1, 1, 8)
elif artist == "Pharrell":
    fitMedia(pharrell_drum, 1, 1, 8)
elif artist == "Khalid":
    fitMedia(khalid_drum, 1, 1, 8)
elif artist == "Alicia":
    fitMedia(alicia_drum, 1, 1, 8)
else:
    print("Sorry that is not an
available artist ")
```

Activity

Adjust your code so that you can tell EarSketch which artist you wish to hear a beat from using the example on the **right** which includes the use of a **list**

```
ciara_drum = CIARA_SET_DRUMBEAT_1
pharrell_drum = ENTREP_BEAT_DRUMBEAT
khalid_drum = KHALID_NORM_DRUMBEAT
alicia_drum = AK_UNDOG_STEEL_DRUMS

drum_list =
[ciara_drum, pharrell_drum, khalid_drum, alicia_drum]

artist = input("Name artist: ")
if artist == "Ciara":
    fitMedia(drum_list[0], 1, 1, 8)
elif artist == "Pharrell":
    fitMedia(drum_list[1], 1, 1, 8)
elif artist == "Khalid":
    fitMedia(drum_list[2], 1, 1, 8)
elif artist == "Alicia":
    fitMedia(drum_list[3], 1, 1, 8)
else:
    print("Sorry that is not an available artist ")
```

Trial your solution with a partner

- Swap places with a partner and run their code in EarSketch

- When you type in the name of an artist does it provide the output you were expecting?

- What happens if you try all lowercase or uppercase?

- What feedback can you provide for your partner to develop their solution further?

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