08_control_flow_statements

June 18, 2025

1 *Control Flow Statements*

1.1 if elif else

[1]:
```
age = input("Enter your age:")
age = int(age)
if age >= 18:
    print("You are eligible to cast your vote")
elif age == 17:
    print("You are almost eligible to cast your vote. Please wait for one more␣
 ↪year.")
else :
    print("You are not eligible. ")
```

```
You are eligible to cast your vote
```

2 Examples

[2]:
```
temp = 20
if temp >= 30:
    print("It's hot today")
elif temp <= 10:
    print("It's  cold today")
else:
    print("It's a pleasant day")
```

```
It's a pleasant day
```

[3]:
```
occassion = "Eid-ul-fitr"
if occassion == "Eid-ul-fitr":
    print("Prepare some sweet dishes")
elif occassion == "Eid-ul-Adha":
    print("Prepare some meat dishes")
else:
    print(" make some vegetables")
```

```
Prepare some sweet dishes
```

3 Nested if Statement

[4]:
```
age =18
license = True
if age >= 18:
    if license:
        print("You can drive")
    else:
        print("You can not drive without a license")
else:
    print("You can not drive because you are under age")
```

```
You can drive
```

4 Loop

4.1 1. for loop

[5]:
```
list = ["Ahsan","Ali","Ahmed","Asad"]
for i in list:
    print(i)
```

```
Ahsan
Ali
Ahmed
Asad
```

4.2 2. while loop

[6]:
```
cups_of_tea = 0
while cups_of_tea <5:
    cups_of_tea +=1
    print(f"{cups_of_tea} cup of tea is served!")

print("No more tea for today!")
```

```
1 cup of tea is served!
2 cup of tea is served!
3 cup of tea is served!
4 cup of tea is served!
5 cup of tea is served!
No more tea for today!
```

5 Break Continue Statement

[19]:
```
cups_of_tea = 0
while cups_of_tea <5:
    cups_of_tea +=1
    # print(f"{cups_of_tea} cup of tea is served!")
    # print("i have had", cups_of_tea, "cup of tea")
    if cups_of_tea == 3:
        print("Too much already")
        break
    print("i have had", cups_of_tea, "cup of tea")

print("No more tea for today!")
```

```
i have had 1 cup of tea
i have had 2 cup of tea
Too much already
No more tea for today!
```

6 continue

[25]:
```
cups_of_tea = 0
while cups_of_tea <5:
    cups_of_tea +=1
    # print(f"{cups_of_tea} cup of tea is served!")
    # print("i have had", cups_of_tea, "cup of tea")
    if cups_of_tea ==3:
       continue
    print("i have had", cups_of_tea, "cup of tea")


print("No more tea for today!")
```

```
i have had 1 cup of tea
i have had 2 cup of tea
i have had 4 cup of tea
i have had 5 cup of tea
No more tea for today!
```

7 Range function in loops

for serving tea of cup

[17]:
```
for cup in range(1,6,2):
    print (cup," cup of tea is served!")
```

```
1  cup of tea is served!
3  cup of tea is served!
```

```
5  cup of tea is served!
```

8 Infinite Loops

[ ]:
```python
while True:
    print(" this loop will run forever")
    break # to stop the loop
```

9 Pass Statement

[26]:
```python
cups_of_tea = 0
while cups_of_tea <5:
    cups_of_tea +=1
    pass
    print(f"{cups_of_tea} cup of tea is served!")

print("No more tea for today!")
```

```
1 cup of tea is served!
2 cup of tea is served!
3 cup of tea is served!
4 cup of tea is served!
5 cup of tea is served!
No more tea for today!
```

10 try, except and finally

[3]:
```python
print("Hello, this is the example of try catch in python")
print(1/0)
```

```
Hello, this is the example of try catch in python
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
Cell In[3], line 2
      1 print("Hello, this is the example of try catch in python")
----> 2 print(1/0)

ZeroDivisionError: division by zero
```

[1]:
```python
# example of try except finally
try:
    print("Hello, this is the example of try catch in python")
    print(1/0)
except  ZeroDivisionError:
```

```
    print("You can not divide a number by zero")
finally:
    print("This will always execute, regardless of an error")
```

```
Hello, this is the example of try catch in python
You can not divide a number by zero
This will always execute, regardless of an error
```

[4]:
```
# example of try except finally
try:
    print("Hello, this is the example of try catch in python")
    print(1/5)
except  ZeroDivisionError:
    print("You can not divide a number by zero")
finally:
    print("This will always execute, regardless of an error")
```

```
Hello, this is the example of try catch in python
0.2
This will always execute, regardless of an error
```

[ ]:
```

```