# Demonstrates conditionals

```python
x = int(input("What's x? "))
y = int(input("What's y? "))

if x < y:
    print("x is less than y")
if x > y:
    print("x is greater than y")
if x == y:
    print("x is equal to y")
```

# Demonstrates mutually exclusive conditions

```python
x = int(input("What's x? ")
y = int(input("What's y? "))

if x < y:
    print("x is less than y")
elif x > y:
    print("x is greater than y")
elif x == y:
    print("x is equal to y")
```

# Demonstrates fewer conditions

```python
# Demonstrates fewer conditions

x = int(input("What's x? "))
y = int(input("What's y? "))

if x < y:
    print("x is less than y")
elif x > y:
    print("x is greater than y")
else:
    print("x is equal to y")
```
# Demonstrates inequalities and logical operator

```python
x = int(input("What's x? "))
y = int(input("What's y? "))

if x < y or x > y:
    print("x is not equal to y")
else:
    print("x is equal to y")
```

# Demonstrates equality

```python
x = int(input("What's x? "))
y = int(input("What's y? "))

if x == y:
    print("x is equal to y")
else:
    print("x is not equal to y")
```
# Demonstrates inequality

```python
x = int(input("What's x? "))
y = int(input("What's y? "))

if x != y:
    print("x is not equal to y")
else:
    print("x is equal to y")
```
# Demonstrates inequalities and logical operators

score = int(input("Score: "))

if score >= 90 and score <= 100:
    print("Grade: A")
elif score >= 80 and score < 90:
    print("Grade: B")
elif score >= 70 and score < 80:
    print("Grade: C")
elif score >= 60 and score < 70:
    print("Grade: D")
else:
    print("Grade: F")
# Demonstrates inequalities and logical operators

```python
score = int(input("Score: "))

if 90 <= score and score <= 100:
    print("Grade: A")
elif 80 <= score and score < 90:
    print("Grade: B")
elif 70 <= score and score < 80:
    print("Grade: C")
elif 60 <= score and score < 70:
    print("Grade: D")
else:
    print("Grade: F")
```
# Demonstrates chained comparisons

```python
score = int(input("Score: "))

if 90 <= score <= 100:
    print("Grade: A")
elif 80 <= score < 90:
    print("Grade: B")
elif 70 <= score < 80:
    print("Grade: C")
elif 60 <= score < 70:
    print("Grade: D")
else:
    print("Grade: F")
```
# Demonstrates fewer comparisons

score = int(input("Score: "))

if score >= 90:
    print("Grade: A")
elif score >= 80:
    print("Grade: B")
elif score >= 70:
    print("Grade: C")
elif score >= 60:
    print("Grade: D")
else:
    print("Grade: F")
# Compares strings

```python
answer = input("Do you agree? ")
if answer == "yes":
    print("Agreed")
else:
    print("Not agreed")
```
# Strips string before comparing

```python
answer = input("Do you agree? ").strip()

if answer == "yes":
    print("Agreed")
else:
    print("Not agreed")
```
# Lowercases string before comparing

```python
answer = input("Do you agree? ").strip().lower()
if answer == "yes":
    print("Agreed")
else:
    print("Not agreed")
```
# Compares multiple strings

answer = input("Do you agree? ").strip().lower()

if answer == "yes" or answer == "y":
    print("Agreed")
else:
    print("Not agreed")
# Compares multiple strings

answer = input("Do you agree? ").strip().lower()

if answer.startswith("y"):
    print("Agreed")
else:
    print("Not agreed")
# Demonstrates modulo operator

```python
x = int(input("What's x? "))

if x % 2 == 0:
    print("Even")
else:
    print("Odd")
```
def main():
    x = int(input("What's x? "))
    if is_even(x):
        print("Even")
    else:
        print("Odd")

def is_even(n):
    if n % 2 == 0:
        return True
    else:
        return False

main()
# Demonstrates conditional expressions (ternary operators)

def main():
    x = int(input("What's x? "))
    if is_even(x):
        print("Even")
    else:
        print("Odd")

def is_even(n):
    return True if n % 2 == 0 else False

main()
# Demonstrates returning the value of a Boolean expression

def main():
    x = int(input("What's x? "))
    if is_even(x):
        print("Even")
    else:
        print("Odd")

def is_even(n):
    return n % 2 == 0

main()
# Compares multiple strings with if/elif/else

name = input("What's your name? ")

if name == "Harry":
    print("Gryffindor")
elif name == "Hermione":
    print("Gryffindor")
elif name == "Ron":
    print("Gryffindor")
elif name == "Draco":
    print("Slytherin")
else:
    print("Who?")
# Uses or

name = input(“What's your name? ”)

if name == "Harry" or name == "Hermione" or name == "Ron":
    print("Gryffindor")

elif name == "Draco":
    print("Slytherin")

else:
    print("Who?")
# Uses match with case

name = input("What's your name? ")

match name:
    case "Harry":
        print("Gryffindor")
    case "Hermione":
        print("Gryffindor")
    case "Ron":
        print("Gryffindor")
    case "Draco":
        print("Slytherin")
    case _:
        print("Who?")
# Uses |

name = input("What's your name? ")

match name:
    case "Harry" | "Hermione" | "Ron":
        print("Gryffindor")
    case "Draco":
        print("Slytherin")
    case _:
        print("Who?")