Ch2

2.1

x=int(input("Please input the value of variable x: "))

y=int(input("Please input the value of variable y: "))

if x >= y:

 z = x

else:

 z = y

print(z)

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| --- |
| Please input the value of variable x: 9Please input the value of variable y: 59 |

2.2

x=int(input("Please input the value of variable x: "))

y=int(input("Please input the value of variable y: "))

print("x = ",x)

print("y = ",y)

if x>0 and y>0:

 z = 1

elif x<0 and y<0:

 z = -1

else:

 z = 0

print("z = ",z)

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| --- |
| Please input the value of variable x: 6Please input the value of variable y: 8x = 6y = 8z = 1Please input the value of variable x: 5Please input the value of variable y: -8x = 5y = -8z = 0 |

2.3

x=int(input("Please input the value of variable x: "))

y=int(input("Please input the value of variable y: "))

u=int(input("Please input the value of variable u: "))

v=int(input("Please input the value of variable v: "))

print("x = ",x)

print("y = ",y)

print("u = ",u)

print("v = ",v)

if (x+y) > (u+v):

 z = x + y

else:

 z = u + v

print("z = ",z)

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| --- |
| Please input the value of variable x: 10Please input the value of variable y: 21Please input the value of variable u: 2Please input the value of variable v: 6x = 10y = 21u = 2v = 6z = 31Please input the value of variable x: 3Please input the value of variable y: 9Please input the value of variable u: 10Please input the value of variable v: 18x = 3y = 9u = 10v = 18z = 28 |

2.4

x=int(input("Please input the value of variable x: "))

y=int(input("Please input the value of variable y: "))

u=int(input("Please input the value of variable u: "))

v=int(input("Please input the value of variable v: "))

print("x = ",x)

print("y = ",y)

print("u = ",u)

print("v = ",v)

if (x+y)/(u-v) >= 2:

 z = x - y

else:

 z = u - v

print("z = ",z)

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| --- |
| Please input the value of variable x: 2Please input the value of variable y: 6Please input the value of variable u: 5Please input the value of variable v: 8x = 2y = 6u = 5v = 8z = -3Please input the value of variable x: 16Please input the value of variable y: 14Please input the value of variable u: 5Please input the value of variable v: 2x = 16y = 14u = 5v = 2z = 2 |

2.5

x=int(input("Please input the value of variable x: "))

y=int(input("Please input the value of variable y: "))

print("x = ",x)

print("y = ",y)

if x >= y:

 z = x\*\*2

else:

 z = y\*\*2

print("z = ",z)

|  |
| --- |
| Please input the value of variable x: 10Please input the value of variable y: 2x = 10y = 2z = 100Please input the value of variable x: 10Please input the value of variable y: 14x = 10y = 14z = 196 |

2.6

income = int(input("Please input your income: "))

if income > 4090000:

 rate = 0.4

 difference = 721100

elif income > 2180000:

 rate = 0.3

 difference = 312100

elif income > 1090000:

 rate = 0.21

 difference = 115900

elif income > 410000:

 rate = 0.13

 difference = 28700

else:

 rate = 0.06

 difference = 0

tax = (income \* rate) - difference

print("tax = ",tax)

|  |
| --- |
| Please input your income: 42000tax = 2520.0Please input your income: 510000tax = 37600.0Please input your income: 1100000tax = 115100.0Please input your income: 3000000tax = 587900.0Please input your income: 4600000tax = 1118900.0 |