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)

|  |
| --- |
| Please input the value of variable x: 9  Please input the value of variable y: 5  9 |

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)

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

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

|  |
| --- |
| Please input the value of variable x: 2  Please input the value of variable y: 6  Please input the value of variable u: 5  Please input the value of variable v: 8  x = 2  y = 6  u = 5  v = 8  z = -3  Please input the value of variable x: 16  Please input the value of variable y: 14  Please input the value of variable u: 5  Please input the value of variable v: 2  x = 16  y = 14  u = 5  v = 2  z = 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: 10  Please input the value of variable y: 2  x = 10  y = 2  z = 100  Please input the value of variable x: 10  Please input the value of variable y: 14  x = 10  y = 14  z = 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: 42000  tax = 2520.0  Please input your income: 510000  tax = 37600.0  Please input your income: 1100000  tax = 115100.0  Please input your income: 3000000  tax = 587900.0  Please input your income: 4600000  tax = 1118900.0 |