1. The distance between two cities (in miles) is input through the keyboard. Write a program to convert and print this distance in kilometers (km), and meters (m). (1 mile = 1.6 km; 1 km = 1,000 m)

double miles

double km, m;

cin >> miles

km = miles * 1.6

m = 1000 * km

i/p 70

o/p 5

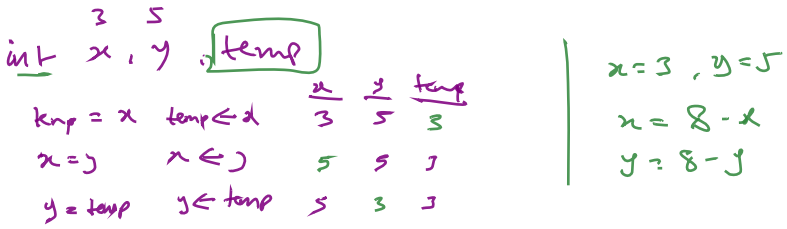
2. Temperature of a city in Fahrenheit degrees is input through the keyboard. Write a program to convert this temperature into Centigrade degrees. Formula: (32°F − 32) × 5/9 = 0°C

```
double f, c;
cin >> f
c = f - 32
c *= 5
c /= 9
cout << c
```

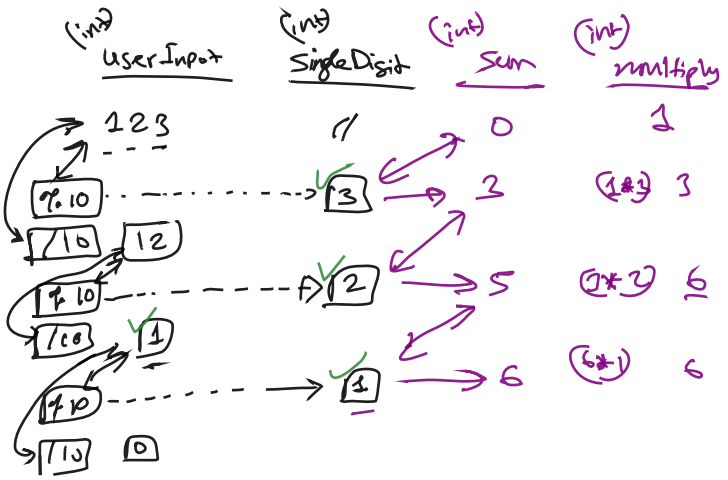
i/p 104

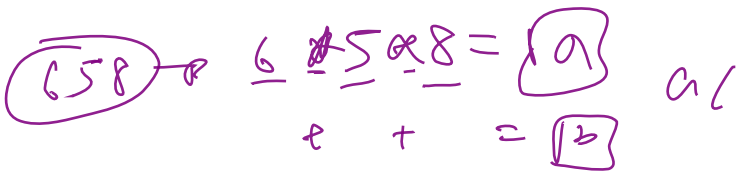
o/p 40

3. Two numbers are input through the keyboard into two int variables x and y. Write a program to interchange the contents of x and y.



4. If a three-digit number is input through the keyboard, write a program to calculate the sum of its digits. (Hint: Use the modulus operator %)



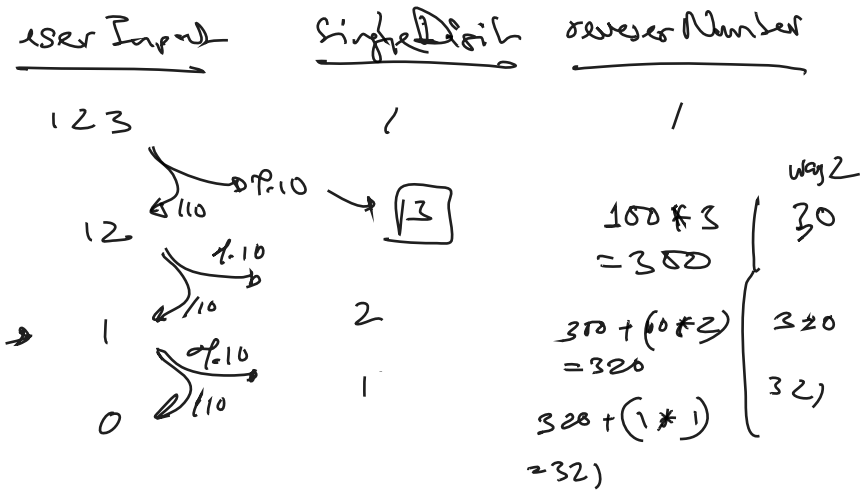



```
int userInput, singleDigit,
    sum = 0;

cin >> userInput

// 3rd digit
singleDigit = userInput % 10
userInput = userInput / 10
sum = sum + singleDigit
// 2nd digit
singleDigit = userInput % 10
userInput = userInput / 10
sum = sum + singleDigit
// 1st digit
sum = sum + userInput
```

5. If a three-digit number is input through the keyboard, write a program to reverse the number. (Hint: Use the modulus operator %)



6. If a three-digit number is input through the keyboard, write a program to print a new number by adding one to each of its digits. For example if the number that is input is 123 then the output should be displayed as 234. (Hint: Use the modulus operator %)