

Practice with Flowcharts

Question #1

```
{  
    float price = 43.25;  
    float discount = 0.65;  
    float total;  
  
    total = price * discount;  
  
    print total;  
}
```

Output _____

Question #2

```
{  
    int x = 6;  
    int result;  
  
    result = sqr(x) * sqr(12);  
  
    print result;  
}
```

Output _____

Question #3

```
{  
    int a, b;  
    int c, d;  
  
    a = 8;  
    b = a;  
    c = b + sqrt(b);  
    d = ( a + b ) * ( c - a );  
  
    print c;  
}
```

Output _____

Question #4

```
{
    float score1, score2, score3;
    float average;
    string grade;

    score1 = 86.3;
    score2 = 97.8;
    score3 = 64.0;
    average = ( score1 + score2 + score3 ) / 3;
    if ( average > 90 ) then
        grade = "A";
    else-if ( ( average >= 80 ) && ( average < 90 ) ) then
        grade = "B";
    else
        grade = "C";

    print grade;
}
```

Output _____

Question #5

```
{  
    int x = 5, y = 2, z = 10;  
  
    if ( x > 5 || x < 12) then  
        print x;  
    else-if ( y > 5 ) then  
        print y;  
    else  
        print z;  
}
```

Output _____

Question #6

```
{
    float a = 6.50, b = 24.2, c = 15.63;
    float total1, total2;
    total1 = a + c;
    total2 = a + b;

    if ( ( total1 <= 55 ) && ( total1 >= 30 ) ) then
        print total1;
    else-if ( total2 > 28 ) then
        print total2;
    else
        print a;
}
```

Output _____

Question #7

```
{  
    int score = 77;  
    string pass = "I passed!";  
    string fail = "I failed!";  
  
    if ( score > 80 ) then  
        print pass;  
    else  
        print fail;  
}
```

Output _____

Question #8

```
{  
    int x = 230;  
    string yes = "HELLO";  
    string no = "GOODBYE";  
  
    if ( x != 10 ) then  
        print yes;  
    else  
        print no;  
}
```

Output _____

Question #9

```
{
    int total = 50;
    int i;

    for (i=10; i >=1; i--)
    {
        total = total / 2;
        i = i -1;
    }
    print total;
}
```

Output _____

Question #10

```
{
    float price = 359.89;
    float salesTax = 1.07;
    float stateTax = 1.04;
    float total;
    int i;

    for (i=1; i<=5; i++)
    {
        if ( i <= 2 )
            total = total + (price * salesTax);
        else
            total = total + (price * stateTax);
    }

    print total;
}
```

Output _____