

# Assignment No. .

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## Pull with Git?

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### Question No. 1

Write a function using reference variables as arguments to swap the values of a pair of integers.

#### Code

*//QUESTION Write a function using reference variables as arguments to swap the values of a pair of integers.*

```
#include <iostream>

void swap(int &a, int &b)
{
    int temp = a;
    a = b;
    b = temp;
}

int main()
{
    std::cout << "Enter two Numbers: " << "
";
    int a, b;
    std::cin >> a >> b;
    std::cout << "Before Swapping: " << "
" << "a: " << a << "
" << "b: " << b << "
";
    swap(a , b);
    std::cout << "After Swapping: " << "
" << "a: " << a << "
" << "b: " << b << "
";
    return 0;
}
```

\$ ./bin/1.o

#### Input

18 90

#### Output

Enter two Numbers:

Before Swapping:

a: 18

b: 90

After Swapping:

a: 90

b: 18

---

### Question No. 2

Write a function that creates a vector of user given size M using new operator.

## Code

```
//QUESTION Write a function that creates a vector of user given size M using new operator.
```

```
#include <iostream>
#include <vector>

int main()
{
    int M;
    std::cout << "Enter the size of the vector you want to create: ";
    std::cin >> M;
    auto vec = new std::vector<int>(M, 0);
    std::cout << "The size of the vector is: " << vec->size() << '
';
    std::cout << "The Elements of the vector are: " << '
';
    for(auto it : *vec)
        std::cout << it << '
';
    return 0;
}
```

```
$ ./bin/2.o
```

## Input

23

## Output

Enter the size of the vector you want to create: The size of the vector is: 23

The Elements of the vector are:

[illegible]

### Question No. 3

Write a program to evaluate the following investment equation

## Code

```
//QUESTION Write a program to evaluate the following investment equation
// $V = P(1+r)^n$ 
//and print the tables which would give the value of V for various
//of the following values of P, r and n:
//P: 1000, 2000, 3000,.....,10,000
//r: 0.10, 0.11, 0.12,.....,0.20
//n: 1, 2, 3,.....,10

#include <iostream>

int main()
{
    std::cout << "|P      "
               << "|r      "
               << "|n      "
               << "|V|" << std::endl;
    std::cout << "|---|---|---|---|" << std::endl;
    for (int n = 1; n <= 10; n++)
    {
        for (int r = 10; r <= 20; r++) // Don't work with doubles use ints and then divide by 10 later.
        {
            for (int P = 100; P <= 1000; P += 100)
            {
                long V = P * (10 + r) * n;
                std::cout << '|' << P*10 << "    |" << r/double(10) << "    |" << n << "    |" << V << '|' << "
";
            }
        }
    }
}
```

\$ ./bin/3.o

## Input

## Output

```
|P |r |n |V|
|---|---|---|---|
|1000 |1 |1 |2000|
|2000 |1 |1 |4000|
|3000 |1 |1 |6000|
|4000 |1 |1 |8000|
|5000 |1 |1 |10000|
|6000 |1 |1 |12000|
|7000 |1 |1 |14000|
|8000 |1 |1 |16000|
|9000 |1 |1 |18000|
|10000 |1 |1 |20000|
|1000 |1.1 |1 |2100|
|2000 |1.1 |1 |4200|
|3000 |1.1 |1 |6300|
|4000 |1.1 |1 |8400|
|5000 |1.1 |1 |10500|
|6000 |1.1 |1 |12600|
|7000 |1.1 |1 |14700|
|8000 |1.1 |1 |16800|
|9000 |1.1 |1 |18900|
|10000 |1.1 |1 |21000|
```

1000	1.2	1	2200
2000	1.2	1	4400
3000	1.2	1	6600
4000	1.2	1	8800
5000	1.2	1	11000
6000	1.2	1	13200
7000	1.2	1	15400
8000	1.2	1	17600
9000	1.2	1	19800
10000	1.2	1	22000
1000	1.3	1	2300
2000	1.3	1	4600
3000	1.3	1	6900
4000	1.3	1	9200
5000	1.3	1	11500
6000	1.3	1	13800
7000	1.3	1	16100
8000	1.3	1	18400
9000	1.3	1	20700
10000	1.3	1	23000
1000	1.4	1	2400
2000	1.4	1	4800
3000	1.4	1	7200
4000	1.4	1	9600
5000	1.4	1	12000
6000	1.4	1	14400
7000	1.4	1	16800
8000	1.4	1	19200
9000	1.4	1	21600
10000	1.4	1	24000
1000	1.5	1	2500
2000	1.5	1	5000
3000	1.5	1	7500
4000	1.5	1	10000
5000	1.5	1	12500
6000	1.5	1	15000
7000	1.5	1	17500
8000	1.5	1	20000
9000	1.5	1	22500
10000	1.5	1	25000
1000	1.6	1	2600
2000	1.6	1	5200
3000	1.6	1	7800
4000	1.6	1	10400
5000	1.6	1	13000
6000	1.6	1	15600
7000	1.6	1	18200
8000	1.6	1	20800
9000	1.6	1	23400
10000	1.6	1	26000
1000	1.7	1	2700
2000	1.7	1	5400
3000	1.7	1	8100
4000	1.7	1	10800
5000	1.7	1	13500
6000	1.7	1	16200
7000	1.7	1	18900
8000	1.7	1	21600
9000	1.7	1	24300
10000	1.7	1	27000
1000	1.8	1	2800

2000	1.8	1	5600
3000	1.8	1	8400
4000	1.8	1	11200
5000	1.8	1	14000
6000	1.8	1	16800
7000	1.8	1	19600
8000	1.8	1	22400
9000	1.8	1	25200
10000	1.8	1	28000
1000	1.9	1	2900
2000	1.9	1	5800
3000	1.9	1	8700
4000	1.9	1	11600
5000	1.9	1	14500
6000	1.9	1	17400
7000	1.9	1	20300
8000	1.9	1	23200
9000	1.9	1	26100
10000	1.9	1	29000
1000	2	1	3000
2000	2	1	6000
3000	2	1	9000
4000	2	1	12000
5000	2	1	15000
6000	2	1	18000
7000	2	1	21000
8000	2	1	24000
9000	2	1	27000
10000	2	1	30000
1000	1	2	4000
2000	1	2	8000
3000	1	2	12000
4000	1	2	16000
5000	1	2	20000
6000	1	2	24000
7000	1	2	28000
8000	1	2	32000
9000	1	2	36000
10000	1	2	40000
1000	1.1	2	4200
2000	1.1	2	8400
3000	1.1	2	12600
4000	1.1	2	16800
5000	1.1	2	21000
6000	1.1	2	25200
7000	1.1	2	29400
8000	1.1	2	33600
9000	1.1	2	37800
10000	1.1	2	42000
1000	1.2	2	4400
2000	1.2	2	8800
3000	1.2	2	13200
4000	1.2	2	17600
5000	1.2	2	22000
6000	1.2	2	26400
7000	1.2	2	30800
8000	1.2	2	35200
9000	1.2	2	39600
10000	1.2	2	44000
1000	1.3	2	4600
2000	1.3	2	9200

3000	1.3	2	13800
4000	1.3	2	18400
5000	1.3	2	23000
6000	1.3	2	27600
7000	1.3	2	32200
8000	1.3	2	36800
9000	1.3	2	41400
10000	1.3	2	46000
1000	1.4	2	4800
2000	1.4	2	9600
3000	1.4	2	14400
4000	1.4	2	19200
5000	1.4	2	24000
6000	1.4	2	28800
7000	1.4	2	33600
8000	1.4	2	38400
9000	1.4	2	43200
10000	1.4	2	48000
1000	1.5	2	5000
2000	1.5	2	10000
3000	1.5	2	15000
4000	1.5	2	20000
5000	1.5	2	25000
6000	1.5	2	30000
7000	1.5	2	35000
8000	1.5	2	40000
9000	1.5	2	45000
10000	1.5	2	50000
1000	1.6	2	5200
2000	1.6	2	10400
3000	1.6	2	15600
4000	1.6	2	20800
5000	1.6	2	26000
6000	1.6	2	31200
7000	1.6	2	36400
8000	1.6	2	41600
9000	1.6	2	46800
10000	1.6	2	52000
1000	1.7	2	5400
2000	1.7	2	10800
3000	1.7	2	16200
4000	1.7	2	21600
5000	1.7	2	27000
6000	1.7	2	32400
7000	1.7	2	37800
8000	1.7	2	43200
9000	1.7	2	48600
10000	1.7	2	54000
1000	1.8	2	5600
2000	1.8	2	11200
3000	1.8	2	16800
4000	1.8	2	22400
5000	1.8	2	28000
6000	1.8	2	33600
7000	1.8	2	39200
8000	1.8	2	44800
9000	1.8	2	50400
10000	1.8	2	56000
1000	1.9	2	5800
2000	1.9	2	11600
3000	1.9	2	17400

4000	1.9	2	23200
5000	1.9	2	29000
6000	1.9	2	34800
7000	1.9	2	40600
8000	1.9	2	46400
9000	1.9	2	52200
10000	1.9	2	58000
1000	2	2	6000
2000	2	2	12000
3000	2	2	18000
4000	2	2	24000
5000	2	2	30000
6000	2	2	36000
7000	2	2	42000
8000	2	2	48000
9000	2	2	54000
10000	2	2	60000
1000	1	3	6000
2000	1	3	12000
3000	1	3	18000
4000	1	3	24000
5000	1	3	30000
6000	1	3	36000
7000	1	3	42000
8000	1	3	48000
9000	1	3	54000
10000	1	3	60000
1000	1.1	3	6300
2000	1.1	3	12600
3000	1.1	3	18900
4000	1.1	3	25200
5000	1.1	3	31500
6000	1.1	3	37800
7000	1.1	3	44100
8000	1.1	3	50400
9000	1.1	3	56700
10000	1.1	3	63000
1000	1.2	3	6600
2000	1.2	3	13200
3000	1.2	3	19800
4000	1.2	3	26400
5000	1.2	3	33000
6000	1.2	3	39600
7000	1.2	3	46200
8000	1.2	3	52800
9000	1.2	3	59400
10000	1.2	3	66000
1000	1.3	3	6900
2000	1.3	3	13800
3000	1.3	3	20700
4000	1.3	3	27600
5000	1.3	3	34500
6000	1.3	3	41400
7000	1.3	3	48300
8000	1.3	3	55200
9000	1.3	3	62100
10000	1.3	3	69000
1000	1.4	3	7200
2000	1.4	3	14400
3000	1.4	3	21600
4000	1.4	3	28800

5000	1.4	3	36000
6000	1.4	3	43200
7000	1.4	3	50400
8000	1.4	3	57600
9000	1.4	3	64800
10000	1.4	3	72000
1000	1.5	3	7500
2000	1.5	3	15000
3000	1.5	3	22500
4000	1.5	3	30000
5000	1.5	3	37500
6000	1.5	3	45000
7000	1.5	3	52500
8000	1.5	3	60000
9000	1.5	3	67500
10000	1.5	3	75000
1000	1.6	3	7800
2000	1.6	3	15600
3000	1.6	3	23400
4000	1.6	3	31200
5000	1.6	3	39000
6000	1.6	3	46800
7000	1.6	3	54600
8000	1.6	3	62400
9000	1.6	3	70200
10000	1.6	3	78000
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2000	1.7	3	16200
3000	1.7	3	24300
4000	1.7	3	32400
5000	1.7	3	40500
6000	1.7	3	48600
7000	1.7	3	56700
8000	1.7	3	64800
9000	1.7	3	72900
10000	1.7	3	81000
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2000	1.8	3	16800
3000	1.8	3	25200
4000	1.8	3	33600
5000	1.8	3	42000
6000	1.8	3	50400
7000	1.8	3	58800
8000	1.8	3	67200
9000	1.8	3	75600
10000	1.8	3	84000
1000	1.9	3	8700
2000	1.9	3	17400
3000	1.9	3	26100
4000	1.9	3	34800
5000	1.9	3	43500
6000	1.9	3	52200
7000	1.9	3	60900
8000	1.9	3	69600
9000	1.9	3	78300
10000	1.9	3	87000
1000	2	3	9000
2000	2	3	18000
3000	2	3	27000
4000	2	3	36000
5000	2	3	45000



6000	2	3	54000
7000	2	3	63000
8000	2	3	72000
9000	2	3	81000
10000	2	3	90000
1000	1	4	8000
2000	1	4	16000
3000	1	4	24000
4000	1	4	32000
5000	1	4	40000
6000	1	4	48000
7000	1	4	56000
8000	1	4	64000
9000	1	4	72000
10000	1	4	80000
1000	1.1	4	8400
2000	1.1	4	16800
3000	1.1	4	25200
4000	1.1	4	33600
5000	1.1	4	42000
6000	1.1	4	50400
7000	1.1	4	58800
8000	1.1	4	67200
9000	1.1	4	75600
10000	1.1	4	84000
1000	1.2	4	8800
2000	1.2	4	17600
3000	1.2	4	26400
4000	1.2	4	35200
5000	1.2	4	44000
6000	1.2	4	52800
7000	1.2	4	61600
8000	1.2	4	70400
9000	1.2	4	79200
10000	1.2	4	88000
1000	1.3	4	9200
2000	1.3	4	18400
3000	1.3	4	27600
4000	1.3	4	36800
5000	1.3	4	46000
6000	1.3	4	55200
7000	1.3	4	64400
8000	1.3	4	73600
9000	1.3	4	82800
10000	1.3	4	92000
1000	1.4	4	9600
2000	1.4	4	19200
3000	1.4	4	28800
4000	1.4	4	38400
5000	1.4	4	48000
6000	1.4	4	57600
7000	1.4	4	67200
8000	1.4	4	76800
9000	1.4	4	86400
10000	1.4	4	96000
1000	1.5	4	10000
2000	1.5	4	20000
3000	1.5	4	30000
4000	1.5	4	40000
5000	1.5	4	50000
6000	1.5	4	60000

7000	1.5	4	70000
8000	1.5	4	80000
9000	1.5	4	90000
10000	1.5	4	100000
1000	1.6	4	10400
2000	1.6	4	20800
3000	1.6	4	31200
4000	1.6	4	41600
5000	1.6	4	52000
6000	1.6	4	62400
7000	1.6	4	72800
8000	1.6	4	83200
9000	1.6	4	93600
10000	1.6	4	104000
1000	1.7	4	10800
2000	1.7	4	21600
3000	1.7	4	32400
4000	1.7	4	43200
5000	1.7	4	54000
6000	1.7	4	64800
7000	1.7	4	75600
8000	1.7	4	86400
9000	1.7	4	97200
10000	1.7	4	108000
1000	1.8	4	11200
2000	1.8	4	22400
3000	1.8	4	33600
4000	1.8	4	44800
5000	1.8	4	56000
6000	1.8	4	67200
7000	1.8	4	78400
8000	1.8	4	89600
9000	1.8	4	100800
10000	1.8	4	112000
1000	1.9	4	11600
2000	1.9	4	23200
3000	1.9	4	34800
4000	1.9	4	46400
5000	1.9	4	58000
6000	1.9	4	69600
7000	1.9	4	81200
8000	1.9	4	92800
9000	1.9	4	104400
10000	1.9	4	116000
1000	2	4	12000
2000	2	4	24000
3000	2	4	36000
4000	2	4	48000
5000	2	4	60000
6000	2	4	72000
7000	2	4	84000
8000	2	4	96000
9000	2	4	108000
10000	2	4	120000
1000	1	5	10000
2000	1	5	20000
3000	1	5	30000
4000	1	5	40000
5000	1	5	50000
6000	1	5	60000
7000	1	5	70000

8000	1	5	80000
9000	1	5	90000
10000	1	5	100000
1000	1.1	5	10500
2000	1.1	5	21000
3000	1.1	5	31500
4000	1.1	5	42000
5000	1.1	5	52500
6000	1.1	5	63000
7000	1.1	5	73500
8000	1.1	5	84000
9000	1.1	5	94500
10000	1.1	5	105000
1000	1.2	5	11000
2000	1.2	5	22000
3000	1.2	5	33000
4000	1.2	5	44000
5000	1.2	5	55000
6000	1.2	5	66000
7000	1.2	5	77000
8000	1.2	5	88000
9000	1.2	5	99000
10000	1.2	5	110000
1000	1.3	5	11500
2000	1.3	5	23000
3000	1.3	5	34500
4000	1.3	5	46000
5000	1.3	5	57500
6000	1.3	5	69000
7000	1.3	5	80500
8000	1.3	5	92000
9000	1.3	5	103500
10000	1.3	5	115000
1000	1.4	5	12000
2000	1.4	5	24000
3000	1.4	5	36000
4000	1.4	5	48000
5000	1.4	5	60000
6000	1.4	5	72000
7000	1.4	5	84000
8000	1.4	5	96000
9000	1.4	5	108000
10000	1.4	5	120000
1000	1.5	5	12500
2000	1.5	5	25000
3000	1.5	5	37500
4000	1.5	5	50000
5000	1.5	5	62500
6000	1.5	5	75000
7000	1.5	5	87500
8000	1.5	5	100000
9000	1.5	5	112500
10000	1.5	5	125000
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2000	1.6	5	26000
3000	1.6	5	39000
4000	1.6	5	52000
5000	1.6	5	65000
6000	1.6	5	78000
7000	1.6	5	91000
8000	1.6	5	104000

9000	1.6	5	117000
10000	1.6	5	130000
1000	1.7	5	13500
2000	1.7	5	27000
3000	1.7	5	40500
4000	1.7	5	54000
5000	1.7	5	67500
6000	1.7	5	81000
7000	1.7	5	94500
8000	1.7	5	108000
9000	1.7	5	121500
10000	1.7	5	135000
1000	1.8	5	14000
2000	1.8	5	28000
3000	1.8	5	42000
4000	1.8	5	56000
5000	1.8	5	70000
6000	1.8	5	84000
7000	1.8	5	98000
8000	1.8	5	112000
9000	1.8	5	126000
10000	1.8	5	140000
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2000	1.9	5	29000
3000	1.9	5	43500
4000	1.9	5	58000
5000	1.9	5	72500
6000	1.9	5	87000
7000	1.9	5	101500
8000	1.9	5	116000
9000	1.9	5	130500
10000	1.9	5	145000
1000	2	5	15000
2000	2	5	30000
3000	2	5	45000
4000	2	5	60000
5000	2	5	75000
6000	2	5	90000
7000	2	5	105000
8000	2	5	120000
9000	2	5	135000
10000	2	5	150000
1000	1	6	12000
2000	1	6	24000
3000	1	6	36000
4000	1	6	48000
5000	1	6	60000
6000	1	6	72000
7000	1	6	84000
8000	1	6	96000
9000	1	6	108000
10000	1	6	120000
1000	1.1	6	12600
2000	1.1	6	25200
3000	1.1	6	37800
4000	1.1	6	50400
5000	1.1	6	63000
6000	1.1	6	75600
7000	1.1	6	88200
8000	1.1	6	100800
9000	1.1	6	113400

10000	1.1	6	126000
1000	1.2	6	13200
2000	1.2	6	26400
3000	1.2	6	39600
4000	1.2	6	52800
5000	1.2	6	66000
6000	1.2	6	79200
7000	1.2	6	92400
8000	1.2	6	105600
9000	1.2	6	118800
10000	1.2	6	132000
1000	1.3	6	13800
2000	1.3	6	27600
3000	1.3	6	41400
4000	1.3	6	55200
5000	1.3	6	69000
6000	1.3	6	82800
7000	1.3	6	96600
8000	1.3	6	110400
9000	1.3	6	124200
10000	1.3	6	138000
1000	1.4	6	14400
2000	1.4	6	28800
3000	1.4	6	43200
4000	1.4	6	57600
5000	1.4	6	72000
6000	1.4	6	86400
7000	1.4	6	100800
8000	1.4	6	115200
9000	1.4	6	129600
10000	1.4	6	144000
1000	1.5	6	15000
2000	1.5	6	30000
3000	1.5	6	45000
4000	1.5	6	60000
5000	1.5	6	75000
6000	1.5	6	90000
7000	1.5	6	105000
8000	1.5	6	120000
9000	1.5	6	135000
10000	1.5	6	150000
1000	1.6	6	15600
2000	1.6	6	31200
3000	1.6	6	46800
4000	1.6	6	62400
5000	1.6	6	78000
6000	1.6	6	93600
7000	1.6	6	109200
8000	1.6	6	124800
9000	1.6	6	140400
10000	1.6	6	156000
1000	1.7	6	16200
2000	1.7	6	32400
3000	1.7	6	48600
4000	1.7	6	64800
5000	1.7	6	81000
6000	1.7	6	97200
7000	1.7	6	113400
8000	1.7	6	129600
9000	1.7	6	145800
10000	1.7	6	162000

1000	1.8	6	16800
2000	1.8	6	33600
3000	1.8	6	50400
4000	1.8	6	67200
5000	1.8	6	84000
6000	1.8	6	100800
7000	1.8	6	117600
8000	1.8	6	134400
9000	1.8	6	151200
10000	1.8	6	168000
1000	1.9	6	17400
2000	1.9	6	34800
3000	1.9	6	52200
4000	1.9	6	69600
5000	1.9	6	87000
6000	1.9	6	104400
7000	1.9	6	121800
8000	1.9	6	139200
9000	1.9	6	156600
10000	1.9	6	174000
1000	2	6	18000
2000	2	6	36000
3000	2	6	54000
4000	2	6	72000
5000	2	6	90000
6000	2	6	108000
7000	2	6	126000
8000	2	6	144000
9000	2	6	162000
10000	2	6	180000
1000	1	7	14000
2000	1	7	28000
3000	1	7	42000
4000	1	7	56000
5000	1	7	70000
6000	1	7	84000
7000	1	7	98000
8000	1	7	112000
9000	1	7	126000
10000	1	7	140000
1000	1.1	7	14700
2000	1.1	7	29400
3000	1.1	7	44100
4000	1.1	7	58800
5000	1.1	7	73500
6000	1.1	7	88200
7000	1.1	7	102900
8000	1.1	7	117600
9000	1.1	7	132300
10000	1.1	7	147000
1000	1.2	7	15400
2000	1.2	7	30800
3000	1.2	7	46200
4000	1.2	7	61600
5000	1.2	7	77000
6000	1.2	7	92400
7000	1.2	7	107800
8000	1.2	7	123200
9000	1.2	7	138600
10000	1.2	7	154000
1000	1.3	7	16100

2000	1.3	7	32200
3000	1.3	7	48300
4000	1.3	7	64400
5000	1.3	7	80500
6000	1.3	7	96600
7000	1.3	7	112700
8000	1.3	7	128800
9000	1.3	7	144900
10000	1.3	7	161000
1000	1.4	7	16800
2000	1.4	7	33600
3000	1.4	7	50400
4000	1.4	7	67200
5000	1.4	7	84000
6000	1.4	7	100800
7000	1.4	7	117600
8000	1.4	7	134400
9000	1.4	7	151200
10000	1.4	7	168000
1000	1.5	7	17500
2000	1.5	7	35000
3000	1.5	7	52500
4000	1.5	7	70000
5000	1.5	7	87500
6000	1.5	7	105000
7000	1.5	7	122500
8000	1.5	7	140000
9000	1.5	7	157500
10000	1.5	7	175000
1000	1.6	7	18200
2000	1.6	7	36400
3000	1.6	7	54600
4000	1.6	7	72800
5000	1.6	7	91000
6000	1.6	7	109200
7000	1.6	7	127400
8000	1.6	7	145600
9000	1.6	7	163800
10000	1.6	7	182000
1000	1.7	7	18900
2000	1.7	7	37800
3000	1.7	7	56700
4000	1.7	7	75600
5000	1.7	7	94500
6000	1.7	7	113400
7000	1.7	7	132300
8000	1.7	7	151200
9000	1.7	7	170100
10000	1.7	7	189000
1000	1.8	7	19600
2000	1.8	7	39200
3000	1.8	7	58800
4000	1.8	7	78400
5000	1.8	7	98000
6000	1.8	7	117600
7000	1.8	7	137200
8000	1.8	7	156800
9000	1.8	7	176400
10000	1.8	7	196000
1000	1.9	7	20300
2000	1.9	7	40600

3000	1.9	7	60900
4000	1.9	7	81200
5000	1.9	7	101500
6000	1.9	7	121800
7000	1.9	7	142100
8000	1.9	7	162400
9000	1.9	7	182700
10000	1.9	7	203000
1000	2	7	21000
2000	2	7	42000
3000	2	7	63000
4000	2	7	84000
5000	2	7	105000
6000	2	7	126000
7000	2	7	147000
8000	2	7	168000
9000	2	7	189000
10000	2	7	210000
1000	1	8	16000
2000	1	8	32000
3000	1	8	48000
4000	1	8	64000
5000	1	8	80000
6000	1	8	96000
7000	1	8	112000
8000	1	8	128000
9000	1	8	144000
10000	1	8	160000
1000	1.1	8	16800
2000	1.1	8	33600
3000	1.1	8	50400
4000	1.1	8	67200
5000	1.1	8	84000
6000	1.1	8	100800
7000	1.1	8	117600
8000	1.1	8	134400
9000	1.1	8	151200
10000	1.1	8	168000
1000	1.2	8	17600
2000	1.2	8	35200
3000	1.2	8	52800
4000	1.2	8	70400
5000	1.2	8	88000
6000	1.2	8	105600
7000	1.2	8	123200
8000	1.2	8	140800
9000	1.2	8	158400
10000	1.2	8	176000
1000	1.3	8	18400
2000	1.3	8	36800
3000	1.3	8	55200
4000	1.3	8	73600
5000	1.3	8	92000
6000	1.3	8	110400
7000	1.3	8	128800
8000	1.3	8	147200
9000	1.3	8	165600
10000	1.3	8	184000
1000	1.4	8	19200
2000	1.4	8	38400
3000	1.4	8	57600



4000	1.4	8	76800
5000	1.4	8	96000
6000	1.4	8	115200
7000	1.4	8	134400
8000	1.4	8	153600
9000	1.4	8	172800
10000	1.4	8	192000
1000	1.5	8	20000
2000	1.5	8	40000
3000	1.5	8	60000
4000	1.5	8	80000
5000	1.5	8	100000
6000	1.5	8	120000
7000	1.5	8	140000
8000	1.5	8	160000
9000	1.5	8	180000
10000	1.5	8	200000
1000	1.6	8	20800
2000	1.6	8	41600
3000	1.6	8	62400
4000	1.6	8	83200
5000	1.6	8	104000
6000	1.6	8	124800
7000	1.6	8	145600
8000	1.6	8	166400
9000	1.6	8	187200
10000	1.6	8	208000
1000	1.7	8	21600
2000	1.7	8	43200
3000	1.7	8	64800
4000	1.7	8	86400
5000	1.7	8	108000
6000	1.7	8	129600
7000	1.7	8	151200
8000	1.7	8	172800
9000	1.7	8	194400
10000	1.7	8	216000
1000	1.8	8	22400
2000	1.8	8	44800
3000	1.8	8	67200
4000	1.8	8	89600
5000	1.8	8	112000
6000	1.8	8	134400
7000	1.8	8	156800
8000	1.8	8	179200
9000	1.8	8	201600
10000	1.8	8	224000
1000	1.9	8	23200
2000	1.9	8	46400
3000	1.9	8	69600
4000	1.9	8	92800
5000	1.9	8	116000
6000	1.9	8	139200
7000	1.9	8	162400
8000	1.9	8	185600
9000	1.9	8	208800
10000	1.9	8	232000
1000	2	8	24000
2000	2	8	48000
3000	2	8	72000
4000	2	8	96000

5000	2	8	120000
6000	2	8	144000
7000	2	8	168000
8000	2	8	192000
9000	2	8	216000
10000	2	8	240000
1000	1	9	18000
2000	1	9	36000
3000	1	9	54000
4000	1	9	72000
5000	1	9	90000
6000	1	9	108000
7000	1	9	126000
8000	1	9	144000
9000	1	9	162000
10000	1	9	180000
1000	1.1	9	18900
2000	1.1	9	37800
3000	1.1	9	56700
4000	1.1	9	75600
5000	1.1	9	94500
6000	1.1	9	113400
7000	1.1	9	132300
8000	1.1	9	151200
9000	1.1	9	170100
10000	1.1	9	189000
1000	1.2	9	19800
2000	1.2	9	39600
3000	1.2	9	59400
4000	1.2	9	79200
5000	1.2	9	99000
6000	1.2	9	118800
7000	1.2	9	138600
8000	1.2	9	158400
9000	1.2	9	178200
10000	1.2	9	198000
1000	1.3	9	20700
2000	1.3	9	41400
3000	1.3	9	62100
4000	1.3	9	82800
5000	1.3	9	103500
6000	1.3	9	124200
7000	1.3	9	144900
8000	1.3	9	165600
9000	1.3	9	186300
10000	1.3	9	207000
1000	1.4	9	21600
2000	1.4	9	43200
3000	1.4	9	64800
4000	1.4	9	86400
5000	1.4	9	108000
6000	1.4	9	129600
7000	1.4	9	151200
8000	1.4	9	172800
9000	1.4	9	194400
10000	1.4	9	216000
1000	1.5	9	22500
2000	1.5	9	45000
3000	1.5	9	67500
4000	1.5	9	90000
5000	1.5	9	112500

6000	1.5	9	135000
7000	1.5	9	157500
8000	1.5	9	180000
9000	1.5	9	202500
10000	1.5	9	225000
1000	1.6	9	23400
2000	1.6	9	46800
3000	1.6	9	70200
4000	1.6	9	93600
5000	1.6	9	117000
6000	1.6	9	140400
7000	1.6	9	163800
8000	1.6	9	187200
9000	1.6	9	210600
10000	1.6	9	234000
1000	1.7	9	24300
2000	1.7	9	48600
3000	1.7	9	72900
4000	1.7	9	97200
5000	1.7	9	121500
6000	1.7	9	145800
7000	1.7	9	170100
8000	1.7	9	194400
9000	1.7	9	218700
10000	1.7	9	243000
1000	1.8	9	25200
2000	1.8	9	50400
3000	1.8	9	75600
4000	1.8	9	100800
5000	1.8	9	126000
6000	1.8	9	151200
7000	1.8	9	176400
8000	1.8	9	201600
9000	1.8	9	226800
10000	1.8	9	252000
1000	1.9	9	26100
2000	1.9	9	52200
3000	1.9	9	78300
4000	1.9	9	104400
5000	1.9	9	130500
6000	1.9	9	156600
7000	1.9	9	182700
8000	1.9	9	208800
9000	1.9	9	234900
10000	1.9	9	261000
1000	2	9	27000
2000	2	9	54000
3000	2	9	81000
4000	2	9	108000
5000	2	9	135000
6000	2	9	162000
7000	2	9	189000
8000	2	9	216000
9000	2	9	243000
10000	2	9	270000
1000	1	10	20000
2000	1	10	40000
3000	1	10	60000
4000	1	10	80000
5000	1	10	100000
6000	1	10	120000

7000	1	10	140000
8000	1	10	160000
9000	1	10	180000
10000	1	10	200000
1000	1.1	10	21000
2000	1.1	10	42000
3000	1.1	10	63000
4000	1.1	10	84000
5000	1.1	10	105000
6000	1.1	10	126000
7000	1.1	10	147000
8000	1.1	10	168000
9000	1.1	10	189000
10000	1.1	10	210000
1000	1.2	10	22000
2000	1.2	10	44000
3000	1.2	10	66000
4000	1.2	10	88000
5000	1.2	10	110000
6000	1.2	10	132000
7000	1.2	10	154000
8000	1.2	10	176000
9000	1.2	10	198000
10000	1.2	10	220000
1000	1.3	10	23000
2000	1.3	10	46000
3000	1.3	10	69000
4000	1.3	10	92000
5000	1.3	10	115000
6000	1.3	10	138000
7000	1.3	10	161000
8000	1.3	10	184000
9000	1.3	10	207000
10000	1.3	10	230000
1000	1.4	10	24000
2000	1.4	10	48000
3000	1.4	10	72000
4000	1.4	10	96000
5000	1.4	10	120000
6000	1.4	10	144000
7000	1.4	10	168000
8000	1.4	10	192000
9000	1.4	10	216000
10000	1.4	10	240000
1000	1.5	10	25000
2000	1.5	10	50000
3000	1.5	10	75000
4000	1.5	10	100000
5000	1.5	10	125000
6000	1.5	10	150000
7000	1.5	10	175000
8000	1.5	10	200000
9000	1.5	10	225000
10000	1.5	10	250000
1000	1.6	10	26000
2000	1.6	10	52000
3000	1.6	10	78000
4000	1.6	10	104000
5000	1.6	10	130000
6000	1.6	10	156000
7000	1.6	10	182000

8000	1.6	10	208000
9000	1.6	10	234000
10000	1.6	10	260000
1000	1.7	10	27000
2000	1.7	10	54000
3000	1.7	10	81000
4000	1.7	10	108000
5000	1.7	10	135000
6000	1.7	10	162000
7000	1.7	10	189000
8000	1.7	10	216000
9000	1.7	10	243000
10000	1.7	10	270000
1000	1.8	10	28000
2000	1.8	10	56000
3000	1.8	10	84000
4000	1.8	10	112000
5000	1.8	10	140000
6000	1.8	10	168000
7000	1.8	10	196000
8000	1.8	10	224000
9000	1.8	10	252000
10000	1.8	10	280000
1000	1.9	10	29000
2000	1.9	10	58000
3000	1.9	10	87000
4000	1.9	10	116000
5000	1.9	10	145000
6000	1.9	10	174000
7000	1.9	10	203000
8000	1.9	10	232000
9000	1.9	10	261000
10000	1.9	10	290000
1000	2	10	30000
2000	2	10	60000
3000	2	10	90000
4000	2	10	120000
5000	2	10	150000
6000	2	10	180000
7000	2	10	210000
8000	2	10	240000
9000	2	10	270000
10000	2	10	300000

---

#### Question No. 4

An election is contested by five candidates. The candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a program to read the ballots and count the vote cast for each candidate using an array variable count. In case, a number read is outside the range 1 to 5, the ballot should be considered as a “spoilt ballot” and the program should also count the numbers of “spoilt ballots”.

#### Code

```
//QUESTION An election is contested by five candidates. The candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a program to read the ballots and count the vote cast for each candidate using an array variable count. In case, a number read is outside the range 1 to 5, the ballot should be considered as a “spoilt ballot” and the program should also count the numbers of “spoilt ballots”.

#include <iostream>
#include <array>

int main()
{
```

```
std::array<int , 5> count;
int spoiledVotes;
for(int i; std::cin >> i; )
{
    if(i > 5 || i < 1)
        spoiledVotes++;
    else
        count[i-1]++;
}
```

\$ ./bin/4.o

### Input

7  
3  
5  
4  
7  
1  
3  
7  
4  
7  
3  
1  
6  
5  
2  
3  
1  
6  
3  
1  
6  
7  
1  
2  
5  
2  
4  
3  
7  
7  
1  
1  
6  
7  
7  
5  
2  
2  
4  
4  
5  
4  
2  
2

6  
7  
1  
7  
4  
7  
3  
7  
2  
7  
6  
4  
7  
1  
4  
6  
5  
6  
7  
2  
2  
4  
1  
4  
5  
6  
2  
5  
1  
4  
4  
2  
5  
3  
5  
1  
3  
4  
5  
6  
3  
1  
6  
1  
7  
3  
2  
6  
4  
6  
7  
1  
7  
4  
1  
2

Output

---