

第一次作业

2-5

BLUE的值是3.

2-7

由一个或多个运算数 (operands) +运算符 (operator) 构成的叫做表达式

是

值为12

2-8

- (1) 50
- (2) 1
- (3) 50.25

2-9

a=32 b=30 c=32

2-10

可以，例如

```
for(int i=1,j=1;i<=n;i++,j++)
```

2-12

for循环实现

```
for(int n=100;n<=200;n+=2)
{
    //code
}
```

while循环实现

```
int n=100;
while(n<=200)
{
    //code
    n+=2;
}
```

do-while循环实现

```
int n=100;
do
{
    //code
    n+=2;
}while(n<=200)
```

2-13

if(x=3) : 将3赋值给变量x, 然后判断x是否为真 (是否为0)

if(x==3) : 如果x等于3

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- (1) 1
- (2) 0
- (3) 1

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- (1) -1
- (2) 3
- (3) 3
- (4) 3

2-25

- (1) 1
- (2) -1
- (3) 0
- (4) 0

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for循环实现

```
//Chillstep ^_ ^
#include<bits/stdc++.h>
using namespace std;

bool is_prime(int x)
{
    if(x==1) return false;
    for(int i=2;i<=x-1;i++)
    {
        if(x%i==0) return false;
    }
    return true;
}
int main()
```

```

{
    for(int i=1;i<=100;i++)
    {
        if(is_prime(i)==true)
            cout<<i<<" ";
    }
    return 0;
}

```

用while循环实现

```

//Chillstep ^_~
#include<bits/stdc++.h>
using namespace std;
bool is_prime(int x)
{
    if(x==1) return false;
    if(x==2) return true;
    int i=2;
    while(x%i!=0)
    {
        i++;
        if(i>=sqrt(x)) return true;
    }
    return false;
}
int main()
{
    int i=1;
    while(i<=100)
    {
        if(is_prime(i)==true)
            cout<<i<<" ";
        i++;
    }
    return 0;
}

```

用do-while循环实现

```

//Chillstep ^_~
#include<bits/stdc++.h>
using namespace std;
bool is_prime(int x)
{
    if(x==1) return false;
    if(x==2) return true;
    int i=2;
    do
    {
        if(x%i==0) return false;
        i++;
    }while(i<=x-1);
    return true;
}

```

```

int main()
{
    int i=1;
    do
    {
        if(is_prime(i)==true)
            cout<<i<<" ";
        i++;
    }while(i<=100);
    return 0;
}

```

2-33

```

//Chillstep ^_~
#include<bits/stdc++.h>
using namespace std;
int main()
{
    enum weekday{SUNDAY,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURDAY}; //声明
变量并赋值
    int ith=SUNDAY;
    cout<<ith<<endl; // 输出0
    return 0;
}

```

2-34

```

//Chillstep ^_~
#include<bits/stdc++.h>
using namespace std;
int main()
{
    int tot=0;
    for(int i=0;i<(1<<5);i++)
    {
        int cnt=0;
        for(int j=0;j<5;j++)
        {
            if((i>>j)&1==1) cnt++;
        }
        if(cnt==3)
        {
            tot++;
            if((i>>0)&1==1) cout<<"red ";
            if((i>>1)&1==1) cout<<"yellow ";
            if((i>>2)&1==1) cout<<"blue ";
            if((i>>3)&1==1) cout<<"white ";
            if((i>>4)&1==1) cout<<"black ";
            puts("");
        }
    }
    cout<<"the number of total solutions:"<<tot<<endl;
    return 0;
}

```

```
red yellow blue
red yellow white
red blue white
yellow blue white
red yellow black
red blue black
yellow blue black
red white black
yellow white black
blue white black
the number of total solutions:10

Process returned 0 (0x0)  execution time : 0.142 s
Press any key to continue.
```

6-1

$$10 * 5 * 15 = 750\text{个}$$

6-3

```
int a[5]={1,2,3,4,5};
```

6-5

```
int a[5][3]={{1,2,3},{4,5,6},{7,8,9},{10,11,12},{13,14,15}};
```

6-15

const int * p1是指向常量的指针，指针所指的常量不能被更改。

int * const p2 是常量的指针，指针本身不能被更改。

6-16

```
//Chillstep ^_ ^
#include<bits/stdc++.h>
using namespace std;

int main()
{
    int a;
    int *p=&a;
    int &r=a;
    *p=10;
    cout<<a<<endl;
    r=5;
    cout<<a<<endl;
    return 0;
}
```

6-17

指针p没有被初始化，可以随意访问内存，这是十分危险的。

6-21

```
//Chillstep ^_~  
#include<bits/stdc++.h>  
using namespace std;  
int cal(string a)  
{  
    int letter=0;  
    for(int i=0;i<a.size();i++)  
    {  
        if((a[i]>='a'&&a[i]<='z')||(a[i]>='A'&&a[i]<='Z'))  
            letter++;  
    }  
    return letter;  
}  
int main()  
{  
    string s;  
    cin>>s;  
    cout<<cal(s)<<endl;  
    return 0;  
}
```