选择题

1. B 2. B 3. C 4. A 5. B 6. B 7. B 8. C 9. B 10. B 11. B 12. B 13. D 14 C B 15. C

应用题

(1)

```cpp
#include<iostream>
#include<vector>
using namespace std ;

const int N = 1e6 + 10 ;
int ne[N] ,neval[N];
vector<int> v ;
int main(){
    string str = " abcaabbabcab" ;
    v.push_back(0) ;
    // 1 2 3 4 5 6 7 8 9 0 1 2
    // a b c a a b b a b c a b
    // 0 1 1 1 2 2 3 1 2 3 4 5
    // 0 1 1 0 2 1 3 0 1 1 0 5
    int len = str.size() - 1 ;
    // 求next[]数组,v来存放next[]数组
    for(int i = 2, j = 0; i <= len; i++)
    {
        while(j && str[i] != str[j+1]) j = ne[j];
        if(str[i] == str[j+1]) j++;
        ne[i] = j;
    }
    v.push_back(ne[0]) ;
    for(int i = 1 ; i < len ; i ++){
        ne[i] ++ ;
        v.push_back(ne[i]);
    }
    cout << "next数组:    " ;
    for(int i = 1 ; i <= len ; i ++){
        cout << v[i] << " " ;
    }
    cout << endl ;
    // 求nextval[]数组
    for(int i = 1 ; i <= len ; i ++){
        if(str[i] == str[v[i]]) neval[i] = neval[v[i]] ;
        else neval[i] = v[i] ;
    }
    cout << "nextval数组: " ;
    for(int i = 1 ; i <= len ; i ++){
        cout << neval[i] << " " ;
    }
    return 0;
}
```

编程题

(6)

```cpp
#include<iostream>
using namespace std ;
const int N = 1e6 + 10 ;
int a[N] ;
int main(){
    int n ;
    cin >> n ;
    for(int i = 0 ; i < n ; i ++) cin >> a[i] ;
    int i = 0 , j = n - 1 ;
    while(j - i != 1){
        if(a[i] > 0 && a[j] < 0){
            swap(a[i],a[j]) ;
            i ++ ;
        }
        else if(a[i] > 0 && a[j] > 0) j -- ;
        else if(a[i] < 0 && a[j] < 0) i ++ ;
        else j -- ,i ++ ;
    }
    for(int i = 0 ; i < n ; i ++) cout << a[i] << " " ;
    return 0;
}
```