一:

1. A
2. C
3. A
4. A
5. C
6. D
7. B
8. C
9. B
10. C

二:

1.

15

2.

a=3,b=5
a=3,b=5,c=7

3.

```
0 -1 -2 -3 -4 -5
1  0 -1 -2 -3 -4
2  1  0 -1 -2 -3
3  2  1  0 -1 -2
4  3  2  1  0 -1
5  4  3  2  1  0
```

4.

-1

5.

First: 14,4,12
Second: 26,4,12
Third: 26,3,6

三、

1.

(1)
```
include
```

(2)
```
letter=0
```

(3)
```
!=
```

(4)
```
ch>='0'&&ch<='9'
```

(5)
```
space++
```

2.

(6)
```
int m,N
```

(7)
```
N<=1
```

(8)
```
N
```

(9)
```
m%i == 0
```

(10)
```
m%i != 0
```

3.

(11)
```
struct student *
```

(12)
```
head=p1
```

(13)
```
p2->next
```

(14)
```
(struct student *)malloc(LEN)
```

(15)
```
NULL
```

四、

1.

```c
#include <stdio.h>
int main() {
  double sum=0;
  double k;
  for (k=1; k <=100 ; k++) {
  sum+=k;
  }
  for (k=1; k <=50 ; k++) {
  sum+=k*k;
  }
  for (k=1; k <=10 ; k++) {
  sum+=(1/k);
  }
  printf("%f\n", sum);
  return 0;
}
```

2.

```c
#include <stdio.h>
int vaild(int a,int b,int c){
  int sum = a*a*a+b*b*b+c*c*c;
  if(sum==(a*100+b*10+c))
  return sum;
  else
  return 0;
}
int main() {
  for (int i = 1; i < 10; ++i) {
  for (int j = 0; j < 10; ++j) {
  for (int k = 0; k < 10; ++k) {
  int rs = vaild(i, j, k);
  if (rs!=0)
  printf("%d\n", rs);
  }
  }
  }
  return 0;
```

```
20  }
```

3.

```
1   #include <stdio.h>
2   int main() {
3    int a=0,b=0,c=0,d=0;
4    int t;
5    int sum=0;
6    scanf("%d", &t);
7    while (t!=-1){
8    sum++;
9    switch (t){
10    case 1:a++;
11    break;
12    case 2:b++;
13    break;
14    case 3:c++;
15    break;
16    case 4:d++;
17    break;
18    default:
19    break;
20    }
21    scanf("%d", &t);
22    }
23    printf("zhang:%d\twang:%d\tli:%d\tzhao:%d\n", a, b, c, d);
24    if (a>sum/2)
25    printf("当选者为zhang\n");
26    else if (b>sum/2)
27    printf("当选者为wang\n");
28    else if (c>sum/2)
29    printf("当选者为li\n");
30    else if(d>sum/2)
31    printf("当选者为zhao\n");
32    else
33    printf("无人选票超过一半\n");
34    return 0;
35  }
```

4.

```
1   #include <stdio.h>
2   int main() {
```

```c
char ch = getchar();
while (ch<'A'||ch>'Z'){
printf("请重新输入\n");
ch = getchar();
}
int m = ch - 'A';
m++;
 int t=m;
 for (int i = 1; i <=m; ++i) {
char c = ch-t+1;
 t--;
 for (int k = 0; k < ch-c; ++k) {
printf(" ");
 }
 for (int j = 0; j < 2*(c-'A'+1)-1; ++j) {
printf("%c", c);
 }
 printf("\n");
 }
 t=1;
 for (int i = m-1; i >0 ; i--) {
char c = ch-t;
 t++;
 for (int k = 0; k < ch-c; ++k) {
printf(" ");
 }
 for (int j = 2*(c-'A'+1)-1; j >0 ; j--) {
printf("%c",c);
 }
 printf("\n");
 }
 return 0;
}
```