一、

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

二、

1.

sqrt((x+y)/((x-y)*pow(a,y))

a!=x && x!=y

2.

y%4==0&&y%100!=0||y%400==0

3.

3.5　　0

4.

20　a　　asic

三、

1.

##

####

######

########

2.

i=3,s=14

3.
a=3,b=5
a=7,b=5,c=10
a=40,b=14,c=10

4.
0 0
1 2
2 4
0 0
2 2
4 8

5.
6=1+2+3

四、

1.
(1) i=M-1
(2) *(a+j)
(3) i--
2.
(4) c=(a+b)/2
(5) b=c
(6) fa=fc
(7) bisection(a,b)
3.
(8) int symm(long n)
(9) symm(m) && symm(m*m) && symm(m*m*m)
(10) m=m*10+i%10
(11) n==m
4.
(12)j=i+1

(13)a[N-i-1][j]

(14)j>i

(15)printf("\n")

五、

1.

```c
#include <stdio.h>
#include <math.h>
//结构体res存放计算结果
struct res{
 int flag; //根的个数
 float x1;
 float x2;
}rs;

//计算二次方程
struct res fun(float a, float b, float c){
 float m = b*b-4*a*c;
 if(m<0){
 rs.flag=0;
 return rs;
 } else if(m==0){
 rs.flag=1;
 rs.x1 = (-b) / (2 * a);
 }
 rs.flag = 2;
 rs.x1 = (-b + sqrt(m)) / (2 * a);
 rs.x2 = (-b - sqrt(m)) / (2 * a);
 return rs;
}
struct res f(float a, float b, float c){
 if(a!=0)
 return fun(a, b, c);
 else if(b!=0){
 rs.flag=1;
 rs.x1=(-c)/b;
 return rs;
 } else
 {
```

```
 rs.flag=0;
 return rs;
 }
}
int main(){
 FILE *f1;
 FILE *f2;
 float a,b,c;
 if ((f1=fopen("Coefficient.txt","r"))==NULL){
 printf("cannot open Coefficient.txt");
 return 0;
 }
 if ((f2=fopen("Result.txt","w"))==NULL){
 printf("cannot open Result.txt");
 return 0;
 }
 while (!feof(f1)){
 fscanf(f1, "%f %f %f", &a, &b, &c);
 //计算根
 f(a, b, c);
 if(rs.flag==2)
 fprintf(f2, "x1=%f x2=%f\n", rs.x1, rs.x2);
 else if(rs.flag==1){
 fprintf(f2, "x=%f\n", rs.x1);
 } else{
 fprintf(f2, "%s\n", "null");
 }
 }
 fclose(f1);
 fclose(f2);
 return 0;
}
```

2.

```
#include <stdio.h>
#include <string.h>
#define N 5
struct student{
 int no;
 char name[10];
 float math,chinese,physics,chemistry,english,total;
```

```
}s[N];
void add(){
 for (int i = 0; i < N; ++i) {
 s[i].total = s[i].math + s[i].chinese + s[i].physics + s[i].chemistry + s[i].english;
 }
}
//将结构体b值赋予a
void wa(struct student *a, struct student *b){
 a->no = b->no;
 strcpy(a->name, b->name);
 a->math=b->math;
 a->chemistry = b->chemistry;
 a->chinese = b->chinese;
 a->physics = b->physics;
 a->english = b->english;
 a->total = b->total;
}
//将学生按总分排序
void sort(){
 struct student temp;
 for (int i = 0; i < N-1; ++i) {
 for (int j = 0; j < N-1-i; ++j) {
 if (s[j].total<s[j+1].total){
 wa(&temp, &s[j]);
 wa(&s[j], &s[j+1]);
 wa(&s[j+1], &temp);
 }
 }

 }
}
int main(){
 printf("请输入学生的学号，姓名，数学，语文，物理，化学，英语成绩：\n");
 for (int i = 0; i < N; ++i) {
 scanf("%d%s%f%f%f%f%f", &s[i].no, s[i].name, &s[i].math, &s[i].chinese, &s[i].chemistry, &s[i].physics,
 &s[i].english);
 }
 add();
 sort();
```

```
  for (int j = 0; j < N; ++j) {
  if
(s[j].math<80||s[j].chinese<80||s[j].chemistry<80||s[j].chemistry<80||s[j].e
nglish<80)
  printf("请关注%s\n", s[j].name);
  }
  float total = s[2].total;
  int i=0;
  while (s[i].total>=total){
  printf("姓名:%s\t学号:%d\n", s[i].name, s[i].no);
  i++;
  }
  return 0;
 }


```

3.

```
#include<stdio.h>
int fun(int k,int n){
 if(n==k||k==0)
 return 1;
 return fun(k-1,n-1)+fun(k,n-1);
}
int main(){
 int k,n;
 printf("请输入k,n\n");
  scanf("%d%d",&k,&n);
  printf("递归值为%d\n",fun(k,n));
  return 0;
 }
```