1. A program calculates the Greatest Common Divisor (GCD) of two numbers in the range [1, 100]. Design test cases for this program using BVC, robust testing, and worst-case testing methods. (4+2+4)=10

2. Consider the following code: (4+2+4)=10

```c
int a,b, c,d;

printf("enter the two variables a,b");
scanf("%d %d",&a,&b);
printf("enter the option 1:Addition,2:subtraction,3:multiplication,4:division");
scanf("%d",&c);

switch(c)
{
    case 1:
        d = a+b;
        printf("Addition of two no.=%d", d);
        break;
    case 2:
        d = a-b;
        printf("Subtraction of two no.=%d", d);
        break;
    case 3:
        d = a*b;
        printf("Multiplication of two no.=%d", d);
        break;
    case 4:
        d = a/b;
        printf("division of two no.=%d",d);
        break;
}

return 0;
```

a) Draw the Control Flow Graph for the program.
b) List all independent paths.
c) Calculate the cyclomatic complexity of the program using all three methods.