

1. (20 pts) What is displayed ?

```
string sa="AA", sb="AB";
int ia=0, ib=8;
char ca='A', cb='a', cc='b';
bool ba=(ca<cb);      //ba=
bool bb!=(sa>sb);      //bb=
cc = cc-1;             //cc=
bool bc=(cb!=cc);      //bc=
ia+=ib%2+2*4;          //ia=
ib/=ia;                //ib=
cout << 'a' << ib << 1*1
    << "\nQUIZ2\t" << sa << endl << bc;
```

2. (20 pts) What is displayed for each of the examples below ?

a. `int x=0,y=9,i=8;`
`if(x<i && i<y){`
 `i=i+2;`
 `x=2;`
`} else{`
 `i=i-1;`
 `y=3;`
`}`
`cout << x << y << i;`

b. `int x=2;`
`if(x!=2){`
 `x=x*x;`
`}`
`else if(x<1 || x>4){`
 `x+=3;`
`} else{`
 `x-=6;`
`}`

3. (20 pts) What is displayed for each of the examples below ?

a. `char c='b';`
`switch(b){`
 `case 'a': c='O'; break;`
 `case 'b': c='N'; break;`
 `default : c='E';`
`}`
`cout << c;`

```
b. int x=2;
   char c='a';
   switch(x){
       case 1:c=c+1;
           break;
       case 2:c=c+2;
       default:c=c+1 ;
   }
   cout << c;
```

4. (20 pts) What is displayed for each of the examples below ?

```
a. int x=0;
   while(x<2){
       cout << x;
   }
```

```
b. int x=2;
   while(x>3){
       cout << x;
       x++;
   }
```

```
c. int x=1;
   while(x<4){
       cout << 2*x;
       x++;
   }
```

5. (20 pts) Write the complete C ++ program corresponding to the simulation below.

Make sure your code covers all the special cases.

$a=0$ and $b \neq 0 \Rightarrow$ no solution

$a=0$ and $b=0 \Rightarrow$ All the real numbers

$a \neq 0 \Rightarrow -b/a$

Solving $ax+b=0$

Enter a and b: 2 10

The solution to $2x + 10 = 0$ is -5.