```c
#include <stdio.h>
#include <conio.h>
void main()
{
    char ch;  ✓
    clrscr();
    printf("Enter a character:");  '+'
    scanf("%c",&ch);
    if(ch>=65 && ch<=90)
        printf("Capital Letter");
    else if(ch>=97 && ch<=122)
        printf("Small Letter");
    else if(ch>=48 && ch<=57)
        printf("Digit");
    else
        printf("Something else");
    getch();
}
```
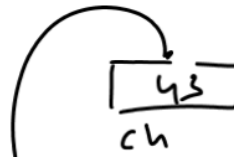
Solution 1

```
┌──────┐
│  43  │
└──────┘
   ch
```

```c
#include <stdio.h>
#include <conio.h>
void main()
{
    char ch;
    clrscr();
    printf("Enter a character:");
    scanf("%c",&ch);           '2'
    if(ch>='A' && ch<='Z')
        printf("Capital Letter");
    else if(ch>='a' && ch<='z')
        printf("Small Letter");
    else if(ch>='0' && ch<='9')
        printf("Digit");
    else
        printf("Something else");
    getch();
}
```
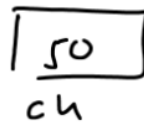
Solution 2

```
┌──────┐
│  50  │
└──────┘
   ch
```

Nested If

Ⅰ

```
if ( test_ cond )                    else
{                                    {
        if ( test_ cond)                    if ( test_ cond )
        {                                   {
                ___                                 ___
                ___                                 ___
        }                                   }
                ___                         else {
        else {                                      ___
                ___                                 ___
                ___                         }
        }                            }
}
```

Ⅱ

```
        if ( test_ cond )
        {
                ___
                ___
        }
        else
        {
                if ( test_ cond)
                {
                        ___
                }
                else {
                        ___
                        ___
                }
        }
}
```

III

```
if ( test cond )
{
        if ( test cond )
        {
                ≡
                ≡
        }
        else {
                ≡
                ≡
        }
}
else {
        ≡
        ≡
}
```

```
if ( cond 1 && cond 2 )
{
        ≡
        ≡
}
```

OR

```
if ( cond 1 )
{
        if ( cond 2 )
        {
                ≡
                ≡
        }
}
```

WAP to accept 3 unique integers from the user. Now without using any logical operator find out the greatest number amongst them.
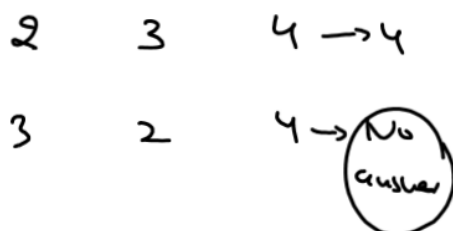
```c
#include <stdio.h>
#include <conio.h>
void main()
{
    int a,b,c;
    printf("Enter 3 integers:");
    scanf("%d %d %d",&a,&b,&c);
```

| 12 | 23 | 14 |
| a | b | c |

```c
if(a>b)
{
    if(a>c)
        printf("Gr no is %d",a);
    else
        printf("Gr no is %d",c);
}
else
{
    if(b>c)
        printf("Gr no is %d",b);
    else
        printf("Gr no is %d",c);
}
getch();
```

Guess The Output

```c
#include <stdio.h>
#include <conio.h>
void main()
{
    int a,b,c;
    printf("Enter 3 integers:");
    scanf("%d %d %d",&a,&b,&c);
```

2   3   4 → 4

3   2   4 → No
              (answer)

```c
if(a>b)
{
    if(a>c)
        printf("Gr no is %d",a);
}
else
{
    if(b>c)
        printf("Gr no is %d",b);
    else
        printf("Gr no is %d",c);
}
getch();
}
```

Admission to a professional course is given according to the following criteria:

Marks in Physics>=50 **and** Marks in chemistry>=55 **and** Marks in maths>=60
and
Total in all 3 subjects>=220 **or** total in maths and physics>=130.

In all other cases admission is not given. WAP to accept marks in physics,chemistry and maths from the user and check whether the user is eligible for admission or not,

Do not use any logical operator and assume that marks are integers and every subect is of 100 marks

① p = 50
   c = 55
   m = 60

① p = 13
   c = 0
   m = 13

An insurance company provides insurance to its employees according to the following criteria:

1. If the employee is MARRIED.
2. If the employee is UNMARRIED , MALE and above 35 years of age
3,If the employee is UNMARRIED , FEMALE and above 30 years of age

In all other cases insurance is denied. WAP to accept age ,gender and marital status from the user as input and find out whether the user is eligible for insurance or not. Do not use any LOGICAL OPERATOR.