Switch Case Assignment

Solve the following code and explain the reason of the output using comments
Q1.

```c
#include <stdio.h>
void main() {
    int a = 20;

    switch(~a) {
      case 20:
            printf("Case 20\n");
            printf("a= %d\n",a);
            break;
      case -20:
            printf("Case -20\n");
            printf("a= %d\n",a);
            break;
      case -21:
            printf("case -21\n");
            printf("a= %d\n",a);
            break;
      default:
            printf("Default\n");
            Break;
}

}
```

Q2.

```c
#include <stdio.h>
void main() {
    int x = 10;
    int y = 20;

    switch(x) {
      case x:
            printf("Case 10\n");
            printf("x= %d\n",x);
            break;
      case y:
            printf("Case 20\n");
```

```
            printf("y= %d\n",y);
            break;

        default:
            printf("Default\n");
            break;


    }
```

Q3
```c
#include<stdio.h>

int main(){

    float a = 5.2;

    switch((int)a){

        case 1:
                    printf("one\n");
                    break;

        case 5:
                    printf("five\n");
                    break;

        case 2:
                    printf("two\n");
                    break;

        default:

                    printf("else\n");
                    break;

    }
```

Q4.
```c
#include <stdio.h>
int main() {
    int x = 2;
```

```
    switch(x << (x + 1)) {
        default:
                printf("\ndefault");
        case 1:
                printf("\n1");
                break;
        case 2:
                printf("\n2");
                break;
        case 3:
                printf("\n3");
                break;
        case 4:
                printf("\n4");
                break;
        case 8:
                printf("\n8");
                break;
        }
    return 0;
```

Q5.
```c
#include <stdio.h>
int main(){

    int a;

    switch(a = (sizeof(int) > -1)){

        case 1: printf("True\n");
                break;

        case 0: printf("False\n");
                break;
    }
    return 0;
}
```

Q6.

```c
#include<stdio.h>
void main() {

        int a=5, b=3;

        switch(a) {

                case 1:
                        printf("One\n");

                case 5:
                        printf("Two.\n");

                case b:
                        printf("Three.\n");

                case 'a':
                        printf("Four.\n");

                default:
                        printf("Default.\n");

        }
}
```

Q7

Write a program in c in which students should enter marks of 5 different subjects. If all subject having above passing marks add them and provide to switch case to print grades(first class second class), if student get fail in any subject program should print "You failed in exam"

Q8

Write a c program in which ask the user to enter a number from 0 to 5 and print it's spelling,if the entered number is greater than 5 print entered number is greater than 5 (use if else or switch case)

e.g

Input -Enter a number - 4
Output - four

Q9.

Write a program which accepts the month no provide that no to switch case and print the no. of days in that month

Input : Enter month number : 7

Output : July has 31 days

Q10

Write a program in c in which user should enter two numbers if both the numbers are positive multiply them and provide to switch case to verify number is even or odd, if user enters any negative number program should terminate saying "Sorry negative numbers not allowed"