Condition
What is the output of this program sir? They have given the value of i as 5. Please explain.

```
int main()
{
    int i=1,j=1;
    for(;;)
    {
        if(i>5)
        break;
        else
        j+=i;
        printf("\n %d",j);
        i+=j;
    }
    return 0;
}
```

Solution
There was the error in the code, so I added the "}" before "return 0". You declare variable i with value 1 and variable j with value 1. for(;;) - it is infinite loop. In loop body you have condition – if variable i is more than 5, you will go out from loop body. If variable i is less then 5 or is equal 5, program will go to another way. j+=i it is the same that j = j + i and i+=j it is the same that i = i + j. In the first loop iteration after line j+=i variable j will have value 2 and will print it. After line i+=j variable i will have value 3. In the second loop iteration after j+=i line variable j will have value 5 and will print it. After line i+=j variable i will have value 8. In the third loop iteration i is more than 5, so loop will break (if condition) and program will finish.

Answer
Output:
2
5