Question 1:

Problem:
Write a Python program to check if a number is both positive and even.

Explanation:
This program takes a number as input and checks if it is greater than 0 (positive) and if the remainder when divided by 2 is 0 (even). If both conditions are true, the result will be `True`; otherwise, it will be `False`.

```
Enter a number: 8
True
```

Question 2:

Problem:
Write a Python program to check if a number is either negative or odd.

Explanation:
This program takes a number as input and checks if it is less than 0 (negative) or if the remainder when divided by 2 is not 0 (odd). If either condition is true, the result will be `True`; otherwise, it will be `False`.

```
Enter a number: 3
True
```

Question 3:

Problem:
Write a Python program to check if a person is eligible to vote (age should be 18 or above and must be a citizen).

Explanation:
This program takes age and citizenship status as inputs and checks if a person's age is 18 or above and if they are a citizen. If both conditions are true, the result will be `True`; otherwise, it will be `False`.

```
Enter your age: 19
Are you a citizen (yes/no)? yes
True
```

```
Enter your age: 12
Are you a citizen (yes/no)? yes
False
```

Question 4:

Problem:
Write a Python program to check if a number is positive but not greater than 100.

Explanation:
This program takes a number as input and checks if it is greater than 0 (positive) and if it is not greater than 100. If both conditions are true, the result will be `True`; otherwise, it will be `False`.

```
Enter a number: 122
False
```

```
Enter a number: 45
True
```

Question 5:

Problem:

Write a Python program to check if a person is eligible for a special offer. The person must be either a new customer or have made at least 5 purchases.

Explanation:

The program should take customer status and the number of purchases as input and use conditional statements to determine eligibility for the special offer.

```
Are you a new customer (yes/no)? no
Enter the number of purchases: 4
You are not eligible for the special offer.
```

```
Are you a new customer (yes/no)? no
Enter the number of purchases: 6
You are eligible for the special offer.
```

```
Are you a new customer (yes/no)? yes
Enter the number of purchases: 4
You are eligible for the special offer.
```