Practical 13

Aim: Write a function that asks for an integer and prints square of it. Use a while loop with a try, except, else block to account for incorrect inputs.

Theory:

In Python, the try-except-else block is used to handle exceptions in the code. The basic idea is to try to execute a block of code and if an exception occurs during the execution, catch and handle it using the except block. If no exception occurs, the code in the else block is executed.

Here's an example of using try-except-else block in Python:

```
try:
    num = int(input("Enter a number: "))
    result = 100 / num
except ZeroDivisionError:
    print("Cannot divide by zero")
except ValueError:
    print("Invalid input")
else:
    print("Result:", result)
```

In the above code, we're trying to take user input as an integer and dividing 100 by it. If the user enters a non-zero number, the division will be performed, and the result will be printed. However, if the user enters zero or a non-numeric value, an exception will occur, and the appropriate message will be printed.

ValueError is a built-in exception in Python that is raised when the input provided by the user cannot be converted into the expected data type. In the above example, we're catching ValueError exception in the except block and printing an error message when the user enters a non-numeric value.