Program: -

```python
import socket;

host = "127.0.0.1"
port = 8888

socket_client = socket.socket(socket.AF_INET,socket.SOCK_STREAM)

try:
    socket_client.connect((host, port))
    print("Server connection established....")

    msg = socket_client.recv(1024).decode()
    print(f"Message from server: {msg}")

    husky_username = "mayekar.n\n"
    first_msg = f"HELLO {husky_username}"
    socket_client.send(first_msg.encode())

    print(f"Message sent to server: {first_msg}")

    while True:
        question = socket_client.recv(1024).decode().strip()
        print(f"Question from server: {question}")

        if(question.startswith("DONE")):
            question_parts = question.split()
            flag = question_parts[1]
            print(f"Flag parsed: {flag}")
            break

        question_parts = question.split()
        print(question_parts)
        if(len(question_parts) != 4 or question_parts[0] != "MATH"):
            print("Question is not in valid format!")
            break

        n1 = int(question_parts[1])
        op = question_parts[2]
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    n2 = int(question_parts[3])

    if op == "+":
        ans = n1 + n2
    elif op == "-":
        ans = n1 - n2
    elif op == "*":
        ans = n1 * n2
    elif op == "/":
        ans = n1 // n2
    else:
        print("Unknown operator in the question!")
        break

    ans_msg = f"ANSWER {ans}\n"
    socket_client.send(ans_msg.encode())
    print(f"Answer sent to server: {ans_msg}")

except socket.error() as e:
    print(f"Error: {e}")
finally:
    socket_client.close()
```

Flag: C7454489CEBD7A395FF245BC8DD3E281BAE8A865979CBEF4A849BFDFC0F587D9