```
import ipaddress


def get_default_subnet_mask(ip_address):
    first_octet = int(ip_address.split('.')[0])

    if first_octet >= 1 and first_octet <= 126:
        return '255.0.0.0'
    elif first_octet >= 128 and first_octet <= 191:
        return '255.255.0.0'
    elif first_octet >= 192 and first_octet <= 223:
        return '255.255.255.0'
    else:
        raise ValueError("Invalid IP address class (must be A, B, or C).")


def subnet_calculator(ip_address):
    try:
        subnet_mask = get_default_subnet_mask(ip_address)
        network = ipaddress.IPv4Network(f"{ip_address}/{subnet_mask}", strict=False)
        network_address = network.network_address
        broadcast_address = network.broadcast_address
        num_hosts = network.num_addresses - 2
        first_host = network[1]
        last_host = network[-2]

        print(f"IP Address: {ip_address}")
        print(f"Default Subnet Mask: {subnet_mask}")
        print(f"Network Address: {network_address}")
        print(f"Broadcast Address: {broadcast_address}")
        print(f"Number of Hosts: {num_hosts}")
        print(f"First Host Address: {first_host}")
        print(f"Last Host Address: {last_host}")

    except ValueError as e:
        print(f"Error: {e}")


ip_address = input("Enter IP address (e.g., 192.168.1.10): ")
subnet_calculator(ip_address)
```

OUTPUT :-

```
Enter IP address (e.g., 192.168.1.10): 10.2.3.3
IP Address: 10.2.3.3
Default Subnet Mask: 255.0.0.0
Network Address: 10.0.0.0
Broadcast Address: 10.255.255.255
Number of Hosts: 16777214
First Host Address: 10.0.0.1
Last Host Address: 10.255.255.254

Process finished with exit code 0
```