**Q1) Match the IPv6 addresses to their corresponding address type**

1. **Loopback address**
2. **Link-local address**
3. **Global unicast address**
4. **Unique-local address**
5. **Multicast address**

|  |  |
| --- | --- |
| **Address** | **Type:** |
| 1. **2001:0DB8:1:ACAD::FE55:0: 210** |  |
| 1. **::1** |  |
| 1. **FC00:22:A:2::CD4:23E4:76FA** |  |
| 1. **2033:DB8:1:1:22:A33D:259A:21FE** |  |
| 1. **FE80::3201:CC01:85B1** |  |
| 1. **FF00::** |  |
| 1. **FF02::2** |  |
| 1. **FF00::DB7:4322:A231:67C** |  |

**Q2) 2001:0DB8:1111:0:67AE:98FF:A908:DD66/64**

1. **IANA Global Routing Number**
2. **Regional Internet Registry (RIR)**
3. **Internet service provider (ISP)**
4. **Site Level Aggregator (SLA)**
5. **Subnet ID (LAN)**
6. **Interface ID**

**Q3) What is IPv6 network settings of your PC. Provide a screenshot of your answer.**

**Q4) compress or decompress the following addresses**

* 2001:0db8:0000:0000:0000:0000:0000:064c
* 2001:0db8:0000:0000:ff32:0000:0000:00a1
* 2001:db8:34::bd0:0:aa
* ::2
* ::