**Лабораторийн ажил 4**

1. Дараах илэрхийллүүд бүгд зөв эсэх, үл нийцэх эсвэл аль аль нь ч биш эсэхийг тодорхойлно уу. Логикийн үнэний хүснэгт ашиглан шийдвэрээ баталгаажуул.
2. Smoke⇒Smoke

|  |  |
| --- | --- |
| Smoke | Smoke ⇒ Smoke |
| True | True |
| False | True |

үнэн

1. .Smoke⇒Fire

|  |  |  |
| --- | --- | --- |
| Smoke | Fire | Smoke⇒Fire |
| True | True | True |
| True | False | False |
| False | True | True |
| False | False | True |

1. (Smoke⇒Fire)⇒(¬Smoke⇒¬Fire)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Smoke | Fire | ¬Smoke | ¬Fire | Smoke⇒Fire | ¬Smoke⇒¬Fire | (Smoke⇒Fire)⇒(¬Smoke⇒¬Fire) |
| True | True | False | False | True | True | True |
| True | False | False | True | False | True | True |
| False | True | True | False | True | False | False |
| False | False | True | True | True | True | True |

1. Smoke∨Fire∨¬Fire

|  |  |  |  |
| --- | --- | --- | --- |
| Smoke | Fire | ¬Fire | Smoke∨Fire∨¬Fire |
| True | True | False | True |
| True | False | False | True |
| False | True | True | True |
| False | False | True | False |

1. ((Smoke∧Heat)⇒Fire)⇔((Smoke⇒Fire)∨(Heat⇒Fire))

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Smoke | Heat | Fire |  |  |  |
| True | True | True | True | True | True |
| True | True | False | False | False | True |
| True | False | True | True | True | True |
| True | False | False | False | True | False |
| False | True | True | True | True | True |
| False | True | False | True | True | True |
| False | False | True | True | True | True |
| False | False | False | True | True | True |