```
\Gamma_{2()} \atop k \atop k(\Gamma) \atop \Gamma \in \mathbb{N} \in \mathbb{N}
\begin{array}{l} N \in \\ prin-\\ ci-\\ pal\\ gon-\\ ence\\ grbup\\ ence\\ grbup\\ evel\\ \Gamma(N) = \{(a)bcd \in_2 () (a)bcd \equiv (1)001 \pmod{N}\}. \end{array}
  \begin{array}{l} \textit{gonf-}\\ \textit{ence}\\ \textit{group}\\ \Gamma\subset_2\\ ()\\ \Gamma(N)\subset\\ \Gamma\end{array}
  \begin{array}{l} \Gamma \\ N \in \\ \Gamma \\ level \\ N \\ \Gamma(N) \\ 2() \rightarrow_2 \\ (/N) \\ 2() \\ 2() \\ \gamma \equiv \\ (abcd) \end{array}
  \begin{array}{l} (abca) \\ 2() \\ fH \rightarrow \\ \tau \in \\ H \\ fac-\\ tor \\ of \\ of \\ du-\\ tor \\ phy \end{array}
   \mathbf{j}(\gamma,\tau)c\tau{+}d
  \begin{array}{l} k \in \\ f[\gamma]_k H \to \\ f[\gamma]_k(\tau) \det(\gamma)^{k/2} \mathbf{j}(\gamma, \tau)^{-k} f(\gamma \tau). \end{array}
 \begin{array}{l} \gamma, \gamma' \in_{2} \\ \langle \rangle \\ \tau \in \\ H \\ j(\gamma \gamma', \tau) = \\ j(\gamma, \gamma'(\tau)) j(\gamma', \tau) \\ f : \\ H \to \\ f[\gamma \gamma']_{k} = \\ (f[\gamma]_{k}) [\gamma']_{k} \\ f \to \\ \Gamma \end{array}
       (1*01) \in
     h \in (1h01) \in
   T \in H \in H = 0
   \exp(2\pi i \tau/h)
  \begin{array}{l} f \\ h \\ h \\ periodic \\ f(\tau + h) = \\ f(\tau) \\ \tau \in \\ h = \\ \downarrow \\ fB \\ 0\} \rightarrow \\ f(\tau) = \end{array}
   \tilde{f}(q_h)
```