

```

{
  "cells": [
    {
      "cell_type": "code",
      "execution_count": 3,
      "id": "12eb1e55-9571-4efe-82dc-2c032b540f04",
      "metadata": {},
      "outputs": [
        {
          "name": "stdout",
          "output_type": "stream",
          "text": [
            "Requirement already satisfied: pandas in c:\\users\\sharm\\anaconda3\\lib\\site-packages (2.2.3)\n",
            "Requirement already satisfied: seaborn in c:\\users\\sharm\\anaconda3\\lib\\site-packages (0.13.2)\n",
            "Requirement already satisfied: numpy>=1.23.2 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from pandas) (1.26.4)\n",
            "Requirement already satisfied: python-dateutil>=2.8.2 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from pandas) (2.8.2)\n",
            "Requirement already satisfied: pytz>=2020.1 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from pandas) (2023.3.post1)\n",
            "Requirement already satisfied: tzdata>=2022.7 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from pandas) (2023.3)\n",
            "Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from seaborn) (3.8.0)\n",
            "Requirement already satisfied: contourpy>=1.0.1 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.2.0)\n",
            "Requirement already satisfied: cycler>=0.10 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.11.0)\n",
            "Requirement already satisfied: fonttools>=4.22.0 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (4.25.0)\n",
            "Requirement already satisfied: kiwisolver>=1.0.1 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.4.4)\n",
            "Requirement already satisfied: packaging>=20.0 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (23.1)\n",
            "Requirement already satisfied: pillow>=6.2.0 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (10.2.0)\n",
            "Requirement already satisfied: pyparsing>=2.3.1 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (3.0.9)\n",
            "Requirement already satisfied: six>=1.5 in c:\\users\\sharm\\anaconda3\\lib\\site-packages (from python-dateutil>=2.8.2->pandas) (1.16.0)\n",
            "Note: you may need to restart the kernel to use updated packages.\n"
          ]
        }
      ],
      "source": [
        "pip install --upgrade pandas seaborn"
      ]
    },
    {
      "cell_type": "markdown",
      "id": "5c06dalc-ae7e-4946-bba5-f2170536830e",
      "metadata": {},
      "source": [
        "##### quality ratings, e.g., 0-4 = low, 5-6 = medium, 7+ = high)"
      ]
    }
  ],
}

```

```

"cell_type": "code",
"execution_count": 6,
"id": "3e750290-20de-4735-b7a5-e867e6aafac6",
"metadata": {},
"outputs": [],
"source": [
"%matplotlib inline"
]
},
{
"cell_type": "code",
"execution_count": 8,
"id": "f464107b-9eb5-4e0e-8222-a8fd58025a0b",
"metadata": {},
"outputs": [
{
"name": "stdout",
"output_type": "stream",
"text": [
"      Unnamed: 0                                     App  \\\n",
"0      0.0      Photo Editor & Candy Camera & Grid & ScrapBook  \n",
"1      1.0      Coloring book moana  \n",
"2      2.0      U Launcher Lite – FREE Live Cool Themes, Hide ...  \n",
"3      3.0      Sketch - Draw & Paint  \n",
"4      4.0      Pixel Draw - Number Art Coloring Book  \n",
"      ...      ...      ...  \n",
"73949      NaN      Houzz Interior Design Ideas  \n",
"73950      NaN      Houzz Interior Design Ideas  \n",
"73951      NaN      Houzz Interior Design Ideas  \n",
"73952      NaN      Houzz Interior Design Ideas  \n",
"73953      NaN      Houzz Interior Design Ideas  \n",
"\n",
"      Category      Rating      Reviews      Size      Installs      Type      Price  \\\n",
"0      ART_AND_DESIGN      4.1      159.0      19.0      10,000+      Free      0  \n",
"1      ART_AND_DESIGN      3.9      967.0      14.0      500,000+      Free      0  \n",
"2      ART_AND_DESIGN      4.7      87510.0      8.7      5,000,000+      Free      0  \n",
"3      ART_AND_DESIGN      4.5      215644.0      25.0      50,000,000+      Free      0  \n",
"4      ART_AND_DESIGN      4.3      967.0      2.8      100,000+      Free      0  \n",
"      ...      ...      ...      ...      ...      ...      ...  \n",
"73949      NaN      NaN      NaN      NaN      NaN      NaN      NaN  \n",
"73950      NaN      NaN      NaN      NaN      NaN      NaN      NaN  \n",
"73951      NaN      NaN      NaN      NaN      NaN      NaN      NaN  \n",
"73952      NaN      NaN      NaN      NaN      NaN      NaN      NaN  \n",
"73953      NaN      NaN      NaN      NaN      NaN      NaN      NaN  \n",
"\n",
"      Content Rating      Genres      Last Updated  \\\n",
"0      Everyone      Art & Design      January 7, 2018  \n",
"1      Everyone      Art & Design;Pretend Play      January 15, 2018  \n",
"2      Everyone      Art & Design      August 1, 2018  \n",
"3      Teen      Art & Design      June 8, 2018  \n",
"4      Everyone      Art & Design;Creativity      June 20, 2018  \n",
"      ...      ...      ...  \n",
"73949      NaN      NaN      NaN  \n",
"73950      NaN      NaN      NaN  \n",
"73951      NaN      NaN      NaN  \n",
"73952      NaN      NaN      NaN  \n",
"73953      NaN      NaN      NaN  \n",
"\n",
"      Current Ver      Android Ver      Translated_Review      Sentiment  \\\n",
"0      1.0.0      4.0.3 and up      NaN      NaN  \n",
"1      2.0.0      4.0.3 and up      NaN      NaN  \n",
"2      1.2.4      4.0.3 and up      NaN      NaN  \n",
"3      Varies with device      4.2 and up      NaN      NaN  \n",
"4      1.1      4.4 and up      NaN      NaN  \n",
"      ...      ...      ...      ...  \n",
"73949      NaN      NaN      NaN      NaN  \n",
"73950      NaN      NaN      NaN      NaN  \n",
]
]
}
]

```

```

"73951          NaN          NaN          NaN          NaN  \n",
"73952          NaN          NaN          NaN          NaN  \n",
"73953          NaN          NaN          NaN          NaN  \n",
"\n",
"      Sentiment_Polarity  Sentiment_Subjectivity  \n",
"0          NaN          NaN  \n",
"1          NaN          NaN  \n",
"2          NaN          NaN  \n",
"3          NaN          NaN  \n",
"4          NaN          NaN  \n",
"...          ...          ...  \n",
"73949          NaN          NaN  \n",
"73950          NaN          NaN  \n",
"73951          NaN          NaN  \n",
"73952          NaN          NaN  \n",
"73953          NaN          NaN  \n",
"\n",
"[73954 rows x 18 columns]\n"
]
},
"source": [
"import numpy as np\n",
"import pandas as pd\n",
"import matplotlib.pyplot as plt\n",
"import seaborn as sns\n",
"\n",
"df1=pd.read_csv(\"E:/chromedownload/apps.csv\")\n",
"df2=pd.read_csv(\"E:/chromedownload/user_reviews.csv\")\n",
"\n",
"df3=pd.concat([df1,df2],ignore_index=True)\n",
"print(df3)"
]
},
{
"cell_type": "code",
"execution_count": 10,
"id": "880fbfa3-ee35-427f-92db-3b2b3a0b8638",
"metadata": {
"scrolled": true
},
"outputs": [
{
"data": {
"text/html": [
"<div>\n",
"<style scoped>\n",
"      .dataframe tbody tr th:only-of-type {\n",
"          vertical-align: middle;\n",
"      }\n",
"\n",
"      .dataframe tbody tr th {\n",
"          vertical-align: top;\n",
"      }\n",
"\n",
"      .dataframe thead th {\n",
"          text-align: right;\n",
"      }\n",
"</style>\n",
"<table border=\"1\" class=\"dataframe\">\n",
"  <thead>\n",
"    <tr style=\"text-align: right;\">\n",
"      <th></th>\n",
"      <th>Unnamed: 0</th>\n",
"      <th>App</th>\n",
"      <th>Category</th>\n",
"      <th>Rating</th>\n",

```

```

"      <th>Reviews</th>\n",
"      <th>Size</th>\n",
"      <th>Installs</th>\n",
"      <th>Type</th>\n",
"      <th>Price</th>\n",
"      <th>Content Rating</th>\n",
"      <th>Genres</th>\n",
"      <th>Last Updated</th>\n",
"      <th>Current Ver</th>\n",
"      <th>Android Ver</th>\n",
"      <th>Translated_Review</th>\n",
"      <th>Sentiment</th>\n",
"      <th>Sentiment_Polarity</th>\n",
"      <th>Sentiment_Subjectivity</th>\n",
"    </tr>\n",
"  </thead>\n",
"  <tbody>\n",
"    <tr>\n",
"      <th>0</th>\n",
"      <td>0.0</td>\n",
"      <td>Photo Editor & Candy Camera & Grid & ScrapBook</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.1</td>\n",
"      <td>159.0</td>\n",
"      <td>19.0</td>\n",
"      <td>10,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design</td>\n",
"      <td>January 7, 2018</td>\n",
"      <td>1.0.0</td>\n",
"      <td>4.0.3 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>1</th>\n",
"      <td>1.0</td>\n",
"      <td>Coloring book moana</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>3.9</td>\n",
"      <td>967.0</td>\n",
"      <td>14.0</td>\n",
"      <td>500,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design;Pretend Play</td>\n",
"      <td>January 15, 2018</td>\n",
"      <td>2.0.0</td>\n",
"      <td>4.0.3 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>2</th>\n",
"      <td>2.0</td>\n",
"      <td>U Launcher Lite – FREE Live Cool Themes, Hide ...</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.7</td>\n",
"      <td>87510.0</td>\n",
"      <td>8.7</td>\n",

```

```

"      <td>5,000,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design</td>\n",
"      <td>August 1, 2018</td>\n",
"      <td>1.2.4</td>\n",
"      <td>4.0.3 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>3</th>\n",
"      <td>3.0</td>\n",
"      <td>Sketch - Draw & Paint</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.5</td>\n",
"      <td>215644.0</td>\n",
"      <td>25.0</td>\n",
"      <td>50,000,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Teen</td>\n",
"      <td>Art & Design</td>\n",
"      <td>June 8, 2018</td>\n",
"      <td>Varies with device</td>\n",
"      <td>4.2 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>4</th>\n",
"      <td>4.0</td>\n",
"      <td>Pixel Draw - Number Art Coloring Book</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.3</td>\n",
"      <td>967.0</td>\n",
"      <td>2.8</td>\n",
"      <td>100,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design; Creativity</td>\n",
"      <td>June 20, 2018</td>\n",
"      <td>1.1</td>\n",
"      <td>4.4 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>...</th>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",

```

```

"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"    </tr>\n",
"  <tr>\n",
"    <th>73949</th>\n",
"    <td>NaN</td>\n",
"    <td>Houzz Interior Design Ideas</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"  </tr>\n",
"  <tr>\n",
"    <th>73950</th>\n",
"    <td>NaN</td>\n",
"    <td>Houzz Interior Design Ideas</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"  </tr>\n",
"  <tr>\n",
"    <th>73951</th>\n",
"    <td>NaN</td>\n",
"    <td>Houzz Interior Design Ideas</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",
"    <td>NaN</td>\n",

```

```

"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73952</th>\n",
"      <td>NaN</td>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73953</th>\n",
"      <td>NaN</td>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"  </tbody>\n",
"</table>\n",
"<p>73954 rows × 18 columns</p>\n",
"</div>"
],
"text/plain": [
"      Unnamed: 0                                     App  \\\n",
"0      0.0      Photo Editor & Candy Camera & Grid & ScrapBook  \n",
"1      1.0                                     Coloring book moana  \n",
"2      2.0      U Launcher Lite – FREE Live Cool Themes, Hide ...  \n",
"3      3.0                                     Sketch - Draw & Paint  \n",
"4      4.0      Pixel Draw - Number Art Coloring Book  \n",
"      ...      ...      ...  \n",
"73949      NaN      Houzz Interior Design Ideas  \n",
"73950      NaN      Houzz Interior Design Ideas  \n",
"73951      NaN      Houzz Interior Design Ideas  \n",
"73952      NaN      Houzz Interior Design Ideas  \n",
"73953      NaN      Houzz Interior Design Ideas  \n",
"\n",
"      Category  Rating  Reviews  Size  Installs  Type Price  \\\n",

```

```

"0      ART_AND_DESIGN      4.1      159.0      19.0      10,000+      Free      0      \n",
"1      ART_AND_DESIGN      3.9      967.0      14.0      500,000+      Free      0      \n",
"2      ART_AND_DESIGN      4.7      87510.0      8.7      5,000,000+      Free      0      \n",
"3      ART_AND_DESIGN      4.5      215644.0      25.0      50,000,000+      Free      0      \n",
"4      ART_AND_DESIGN      4.3      967.0      2.8      100,000+      Free      0      \n",
"...
"73949      NaN      NaN      NaN      NaN      NaN      NaN      NaN      \n",
"73950      NaN      NaN      NaN      NaN      NaN      NaN      NaN      \n",
"73951      NaN      NaN      NaN      NaN      NaN      NaN      NaN      \n",
"73952      NaN      NaN      NaN      NaN      NaN      NaN      NaN      \n",
"73953      NaN      NaN      NaN      NaN      NaN      NaN      NaN      \n",
"\n",
"      Content Rating      Genres      Last Updated      \\\n",
"0      Everyone      Art & Design      January 7, 2018      \n",
"1      Everyone      Art & Design;Pretend Play      January 15, 2018      \n",
"2      Everyone      Art & Design      August 1, 2018      \n",
"3      Teen      Art & Design      June 8, 2018      \n",
"4      Everyone      Art & Design;Creativity      June 20, 2018      \n",
"...
"73949      NaN      NaN      NaN      \n",
"73950      NaN      NaN      NaN      \n",
"73951      NaN      NaN      NaN      \n",
"73952      NaN      NaN      NaN      \n",
"73953      NaN      NaN      NaN      \n",
"\n",
"      Current Ver      Android Ver      Translated_Review      Sentiment      \\\n",
"0      1.0.0      4.0.3 and up      NaN      NaN      \n",
"1      2.0.0      4.0.3 and up      NaN      NaN      \n",
"2      1.2.4      4.0.3 and up      NaN      NaN      \n",
"3      Varies with device      4.2 and up      NaN      NaN      \n",
"4      1.1      4.4 and up      NaN      NaN      \n",
"...
"73949      NaN      NaN      NaN      NaN      \n",
"73950      NaN      NaN      NaN      NaN      \n",
"73951      NaN      NaN      NaN      NaN      \n",
"73952      NaN      NaN      NaN      NaN      \n",
"73953      NaN      NaN      NaN      NaN      \n",
"\n",
"      Sentiment_Polarity      Sentiment_Subjectivity      \n",
"0      NaN      NaN      \n",
"1      NaN      NaN      \n",
"2      NaN      NaN      \n",
"3      NaN      NaN      \n",
"4      NaN      NaN      \n",
"...
"73949      NaN      NaN      \n",
"73950      NaN      NaN      \n",
"73951      NaN      NaN      \n",
"73952      NaN      NaN      \n",
"73953      NaN      NaN      \n",
"\n",
"[73954 rows x 18 columns]"
]
},
"execution_count": 10,
"metadata": {},
"output_type": "execute_result"
}
],
"source": [
"df3"
]
},
{
"cell_type": "code",
"execution_count": 12,
"id": "0df065da-82f2-48bd-9e66-56a0a80ad567",

```



```

"metadata": {},
"outputs": [
  {
    "data": {
      "text/plain": [
        "0      0\n",
        "1      0\n",
        "2      0\n",
        "3      0\n",
        "4      0\n",
        "      ..\n",
        "65     0\n",
        "66     0\n",
        "67     0\n",
        "68     0\n",
        "69     0\n",
        "Name: Price, Length: 70, dtype: object"
      ]
    },
    "execution_count": 12,
    "metadata": {},
    "output_type": "execute_result"
  },
  {
    "source": [
      "df3[\"Price\"].head(70)"
    ]
  },
  {
    "cell_type": "code",
    "execution_count": 14,
    "id": "a05e4872-1603-478e-820d-199b14b8ade9",
    "metadata": {},
    "outputs": [
      {
        "data": {
          "application/vnd.jupyter.widget-view+json": {
            "model_id": "c67cb031f056464ab95d4cf0ba94d4ca",
            "version_major": 2,
            "version_minor": 0
          },
          "text/plain": [
            "Summarize dataset:   0%|          | 0/5 [00:00<?, ?it/s]"
          ]
        },
        "metadata": {},
        "output_type": "display_data"
      },
      {
        "data": {
          "application/vnd.jupyter.widget-view+json": {
            "model_id": "a558b5d31a0e4160a044fd55264f3a44",
            "version_major": 2,
            "version_minor": 0
          },
          "text/plain": [
            "Generate report structure:   0%|          | 0/1 [00:00<?, ?it/s]"
          ]
        },
        "metadata": {},
        "output_type": "display_data"
      },
      {
        "data": {
          "application/vnd.jupyter.widget-view+json": {
            "model_id": "5d3dbd07f7ca483da1f2008e922a6f3e",
            "version_major": 2,

```

```

    "version_minor": 0
  },
  "text/plain": [
    "Render HTML:    0%|          | 0/1 [00:00<?, ?it/s]"
  ]
},
"metadata": {},
"output_type": "display_data"
},
{
  "data": {
    "application/vnd.jupyter.widget-view+json": {
      "model_id": "efb4a6ab7c2f496485c53c617633ba3a",
      "version_major": 2,
      "version_minor": 0
    },
    "text/plain": [
      "Export report to file:    0%|          | 0/1 [00:00<?, ?it/s]"
    ]
  },
  "metadata": {},
  "output_type": "display_data"
}
],
"source": [
  "from ydata_profiling import ProfileReport\n",
  "profile = ProfileReport(df3, title=\"p4 Profiling Report\", explorative=True)\n",
  "profile.to_file(\"p4_Android App Market_profiling.html\")"
]
},
{
  "cell_type": "code",
  "execution_count": 16,
  "id": "dbbb88f7-8e96-4cde-8dbc-c6230c453f17",
  "metadata": {},
  "outputs": [
    {
      "name": "stdout",
      "output_type": "stream",
      "text": [
        "<class 'pandas.core.frame.DataFrame'>\n",
        "RangeIndex: 73954 entries, 0 to 73953\n",
        "Data columns (total 18 columns):\n",
        " #   Column                Non-Null Count  Dtype  \n",
        "---  -\n",
        " 0   Unnamed: 0            9659 non-null   float64\n",
        " 1   App                   73954 non-null  object \n",
        " 2   Category              9659 non-null   object \n",
        " 3   Rating                8196 non-null   float64\n",
        " 4   Reviews               9659 non-null   float64\n",
        " 5   Size                  8432 non-null   float64\n",
        " 6   Installs              9659 non-null   object \n",
        " 7   Type                  9659 non-null   object \n",
        " 8   Price                 9659 non-null   object \n",
        " 9   Content Rating        9659 non-null   object \n",
        "10   Genres                9659 non-null   object \n",
        "11   Last Updated          9659 non-null   object \n",
        "12   Current Ver           9651 non-null   object \n",
        "13   Android Ver           9657 non-null   object \n",
        "14   Translated_Review     37427 non-null  object \n",
        "15   Sentiment              37432 non-null  object \n",
        "16   Sentiment_Polarity    37432 non-null  float64\n",
        "17   Sentiment_Subjectivity 37432 non-null  float64\n",
        "dtypes: float64(6), object(12)\n",
        "memory usage: 10.2+ MB\n"
      ]
    }
  ]
}

```

```

],
"source": [
  "df3.info()"
]
},
{
  "cell_type": "code",
  "execution_count": 19,
  "id": "398e7688-3b67-4e4f-9647-6ad89148a236",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "text/plain": [
          "Unnamed: 0          64295\n",
          "App              0\n",
          "Category         64295\n",
          "Rating           65758\n",
          "Reviews          64295\n",
          "Size             65522\n",
          "Installs         64295\n",
          "Type             64295\n",
          "Price            64295\n",
          "Content Rating   64295\n",
          "Genres           64295\n",
          "Last Updated    64295\n",
          "Current Ver     64303\n",
          "Android Ver     64297\n",
          "Translated_Review 36527\n",
          "Sentiment        36522\n",
          "Sentiment_Polarity 36522\n",
          "Sentiment_Subjectivity 36522\n",
          "dtype: int64"
        ]
      },
      "execution_count": 19,
      "metadata": {},
      "output_type": "execute_result"
    }
  ],
  "source": [
    "df3.isnull().sum()"
  ]
},
{
  "cell_type": "code",
  "execution_count": 21,
  "id": "84f8eea4-a4e5-4efc-9961-e8044afd1892",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "text/html": [
          "<div>\n",
          "<style scoped>\n",
          "    .dataframe tbody tr th:only-of-type {\n",
          "        vertical-align: middle;\n",
          "    }\n",
          "\n",
          "    .dataframe tbody tr th {\n",
          "        vertical-align: top;\n",
          "    }\n",
          "\n",
          "    .dataframe thead th {\n",
          "        text-align: right;\n",
          "    }\n",
          "</style>\n",

```

```

"<table border=\"1\" class=\"dataframe\">\n",
"  <thead>\n",
"    <tr style=\"text-align: right;\">\n",
"      <th></th>\n",
"      <th>App</th>\n",
"    </tr>\n",
"  </thead>\n",
"  <tbody>\n",
"    <tr>\n",
"      <th>0</th>\n",
"      <td>Photo Editor & Candy Camera & Grid & ScrapBook</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>1</th>\n",
"      <td>Coloring book moana</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>2</th>\n",
"      <td>U Launcher Lite – FREE Live Cool Themes, Hide ...</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>3</th>\n",
"      <td>Sketch - Draw & Paint</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>4</th>\n",
"      <td>Pixel Draw - Number Art Coloring Book</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>...</th>\n",
"      <td>...</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73949</th>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73950</th>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73951</th>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73952</th>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73953</th>\n",
"      <td>Houzz Interior Design Ideas</td>\n",
"    </tr>\n",
"  </tbody>\n",
"</table>\n",
"<p>73954 rows × 1 columns</p>\n",
"</div>"
],
"text/plain": [
"App\n",
"0      Photo Editor & Candy Camera & Grid & ScrapBook\n",
"1      Coloring book moana\n",
"2      U Launcher Lite – FREE Live Cool Themes, Hide ...\n",
"3      Sketch - Draw & Paint\n",
"4      Pixel Draw - Number Art Coloring Book\n",
"...\n",
"73949      Houzz Interior Design Ideas\n",
"73950      Houzz Interior Design Ideas\n",

```

```

        "73951", Houzz Interior Design Ideas\n",
        "73952", Houzz Interior Design Ideas\n",
        "73953", Houzz Interior Design Ideas\n",
        "\n",
        "[73954 rows x 1 columns]"
    ],
    },
    "execution_count": 21,
    "metadata": {},
    "output_type": "execute_result"
  },
  ],
  "source": [
    "df3.dropna(axis=1)"
  ],
  },
  {
    "cell_type": "code",
    "execution_count": 23,
    "id": "a39aae41-fd09-49ae-8627-e357303468f6",
    "metadata": {},
    "outputs": [
      {
        "data": {
          "text/plain": [
            "33616"
          ]
        },
        "execution_count": 23,
        "metadata": {},
        "output_type": "execute_result"
      }
    ],
    "source": [
    "df3.duplicated().sum()"
  ],
  },
  {
    "cell_type": "code",
    "execution_count": 25,
    "id": "94223b16-22ea-4b28-8ab3-21c274443ac2",
    "metadata": {},
    "outputs": [],
    "source": [
    "df3.drop_duplicates(inplace=True)"
  ],
  },
  {
    "cell_type": "code",
    "execution_count": 27,
    "id": "ae798547-1807-4468-9fff-795b5b82c7a6",
    "metadata": {},
    "outputs": [
      {
        "data": {
          "text/plain": [
            "0"
          ]
        },
        "execution_count": 27,
        "metadata": {},
        "output_type": "execute_result"
      }
    ],
    "source": [
    "df3.duplicated().sum()"
  ],
  }
]

```

```

},
{
  "cell_type": "code",
  "execution_count": 29,
  "id": "a763dfc2-283f-402e-ba31-eb923f99b057",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "text/plain": [
          "Unnamed: 0          9659\n",
          "App              9713\n",
          "Category         33\n",
          "Rating           39\n",
          "Reviews          5330\n",
          "Size             191\n",
          "Installs         21\n",
          "Type             2\n",
          "Price            92\n",
          "Content Rating   6\n",
          "Genres          118\n",
          "Last Updated    1377\n",
          "Current Ver     2769\n",
          "Android Ver     33\n",
          "Translated_Review 27994\n",
          "Sentiment        3\n",
          "Sentiment_Polarity 5410\n",
          "Sentiment_Subjectivity 4474\n",
          "dtype: int64"
        ]
      },
      "execution_count": 29,
      "metadata": {},
      "output_type": "execute_result"
    }
  ],
  "source": [
    "df3.nunique()"
  ]
},
{
  "cell_type": "code",
  "execution_count": 31,
  "id": "612a127c-db65-4bdc-b1cd-1863ea1553c3",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "text/html": [
          "<div>\n",
          "<style scoped>\n",
          "    .dataframe tbody tr th:only-of-type {\n",
          "        vertical-align: middle;\n",
          "    }\n",
          "\n",
          "    .dataframe tbody tr th {\n",
          "        vertical-align: top;\n",
          "    }\n",
          "\n",
          "    .dataframe thead th {\n",
          "        text-align: right;\n",
          "    }\n",
          "</style>\n",
          "<table border='1' class='dataframe'>\n",
          "  <thead>\n",
          "    <tr style='text-align: right;'>\n",
          "      <th></th>\n",

```

```

"      <th>Unnamed: 0</th>\n",
"      <th>App</th>\n",
"      <th>Category</th>\n",
"      <th>Rating</th>\n",
"      <th>Reviews</th>\n",
"      <th>Size</th>\n",
"      <th>Installs</th>\n",
"      <th>Type</th>\n",
"      <th>Price</th>\n",
"      <th>Content Rating</th>\n",
"      <th>Genres</th>\n",
"      <th>Last Updated</th>\n",
"      <th>Current Ver</th>\n",
"      <th>Android Ver</th>\n",
"      <th>Translated_Review</th>\n",
"      <th>Sentiment</th>\n",
"      <th>Sentiment_Polarity</th>\n",
"      <th>Sentiment_Subjectivity</th>\n",
"    </tr>\n",
"  </thead>\n",
"  <tbody>\n",
"    <tr>\n",
"      <th>0</th>\n",
"      <td>0.0</td>\n",
"      <td>Photo Editor & Candy Camera & Grid & ScrapBook</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.1</td>\n",
"      <td>159.0</td>\n",
"      <td>19.0</td>\n",
"      <td>10,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design</td>\n",
"      <td>January 7, 2018</td>\n",
"      <td>1.0.0</td>\n",
"      <td>4.0.3 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>1</th>\n",
"      <td>1.0</td>\n",
"      <td>Coloring book moana</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>3.9</td>\n",
"      <td>967.0</td>\n",
"      <td>14.0</td>\n",
"      <td>500,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design;Pretend Play</td>\n",
"      <td>January 15, 2018</td>\n",
"      <td>2.0.0</td>\n",
"      <td>4.0.3 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>2</th>\n",
"      <td>2.0</td>\n",
"      <td>U Launcher Lite – FREE Live Cool Themes, Hide ...</td>\n",

```

```

"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.7</td>\n",
"      <td>87510.0</td>\n",
"      <td>8.7</td>\n",
"      <td>5,000,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design</td>\n",
"      <td>August 1, 2018</td>\n",
"      <td>1.2.4</td>\n",
"      <td>4.0.3 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>3</th>\n",
"      <td>3.0</td>\n",
"      <td>Sketch - Draw & Paint</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.5</td>\n",
"      <td>215644.0</td>\n",
"      <td>25.0</td>\n",
"      <td>50,000,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Teen</td>\n",
"      <td>Art & Design</td>\n",
"      <td>June 8, 2018</td>\n",
"      <td>Varies with device</td>\n",
"      <td>4.2 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>4</th>\n",
"      <td>4.0</td>\n",
"      <td>Pixel Draw - Number Art Coloring Book</td>\n",
"      <td>ART_AND_DESIGN</td>\n",
"      <td>4.3</td>\n",
"      <td>967.0</td>\n",
"      <td>2.8</td>\n",
"      <td>100,000+</td>\n",
"      <td>Free</td>\n",
"      <td>0</td>\n",
"      <td>Everyone</td>\n",
"      <td>Art & Design; Creativity</td>\n",
"      <td>June 20, 2018</td>\n",
"      <td>1.1</td>\n",
"      <td>4.4 and up</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>...</th>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",

```



```

"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"      <td>...</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73882</th>\n",
"      <td>NaN</td>\n",
"      <td>Housing-Real Estate & Property</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>If photos posted portal load, fit purpose. I'm...</td>\n",
"      <td>Positive</td>\n",
"      <td>0.225000</td>\n",
"      <td>0.447222</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73885</th>\n",
"      <td>NaN</td>\n",
"      <td>Housing-Real Estate & Property</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>Dumb app, I wanted post property rent give opt...</td>\n",
"      <td>Negative</td>\n",
"      <td>-0.287500</td>\n",
"      <td>0.250000</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>73886</th>\n",
"      <td>NaN</td>\n",
"      <td>Housing-Real Estate & Property</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",
"      <td>NaN</td>\n",

```

1.

```

"73889          NaN          Housing-Real Estate & Property  \n",
"73895          NaN          Houzz Interior Design Ideas  \n",
"\n",
"          Category  Rating  Reviews  Size  Installs  Type  Price  \\\n",
"0  ART_AND_DESIGN  4.1    159.0   19.0    10,000+  Free    0  \n",
"1  ART_AND_DESIGN  3.9    967.0   14.0   500,000+  Free    0  \n",
"2  ART_AND_DESIGN  4.7   87510.0   8.7   5,000,000+  Free    0  \n",
"3  ART_AND_DESIGN  4.5  215644.0  25.0  50,000,000+  Free    0  \n",
"4  ART_AND_DESIGN  4.3    967.0    2.8   100,000+  Free    0  \n",
"...          ...          ...          ...          ...          ...          ...  \n",
"73882          NaN          NaN          NaN          NaN          NaN          NaN  \n",
"73885          NaN          NaN          NaN          NaN          NaN          NaN  \n",
"73886          NaN          NaN          NaN          NaN          NaN          NaN  \n",
"73889          NaN          NaN          NaN          NaN          NaN          NaN  \n",
"73895          NaN          NaN          NaN          NaN          NaN          NaN  \n",
"\n",
"          Content Rating          Genres          Last Updated  \\\n",
"0          Everyone          Art & Design  January 7, 2018  \n",
"1          Everyone  Art & Design;Pretend Play  January 15, 2018  \n",
"2          Everyone          Art & Design  August 1, 2018  \n",
"3          Teen          Art & Design  June 8, 2018  \n",
"4          Everyone  Art & Design;Creativity  June 20, 2018  \n",
"...          ...          ...          ...          ...  \n",
"73882          NaN          NaN          NaN          NaN  \n",
"73885          NaN          NaN          NaN          NaN  \n",
"73886          NaN          NaN          NaN          NaN  \n",
"73889          NaN          NaN          NaN          NaN  \n",
"73895          NaN          NaN          NaN          NaN  \n",
"\n",
"          Current Ver  Android Ver  \\\n",
"0          1.0.0  4.0.3 and up  \n",
"1          2.0.0  4.0.3 and up  \n",
"2          1.2.4  4.0.3 and up  \n",
"3  Varies with device  4.2 and up  \n",
"4          1.1    4.4 and up  \n",
"...          ...          ...  \n",
"73882          NaN          NaN  \n",
"73885          NaN          NaN  \n",
"73886          NaN          NaN  \n",
"73889          NaN          NaN  \n",
"73895          NaN          NaN  \n",
"\n",
"          Translated_Review  Sentiment  \\\n",
"0          NaN          NaN  \n",
"1          NaN          NaN  \n",
"2          NaN          NaN  \n",
"3          NaN          NaN  \n",
"4          NaN          NaN  \n",
"...          ...          ...  \n",
"73882  If photos posted portal load, fit purpose. I'm...  Positive  \n",
"73885  Dumb app, I wanted post property rent give opt...  Negative  \n",
"73886  I property business got link SMS happy perform...  Positive  \n",
"73889  Useless app, I searched flats kondapur, Hydera...  Negative  \n",
"73895          NaN          NaN  \n",
"\n",
"          Sentiment_Polarity  Sentiment_Subjectivity  \n",
"0          NaN          NaN  \n",
"1          NaN          NaN  \n",
"2          NaN          NaN  \n",
"3          NaN          NaN  \n",
"4          NaN          NaN  \n",
"...          ...          ...  \n",
"73882          0.225000          0.447222  \n",
"73885          -0.287500          0.250000  \n",
"73886          0.800000          1.000000  \n",
"73889          -0.316667          0.400000  \n",
"73895          NaN          NaN  \n",

```

```

        "\n",
        "[40338 rows x 18 columns]"
    ]
},
"execution_count": 31,
"metadata": {},
"output_type": "execute_result"
}
],
"source": [
    "df3"
]
},
{
    "cell_type": "code",
    "execution_count": 33,
    "id": "e2f0dba6-73b3-46ba-aeac-5aa8f41c6bbb",
    "metadata": {},
    "outputs": [
        {
            "data": {
                "text/html": [
                    "<div>\n",
                    "<style scoped>\n",
                    "    .dataframe tbody tr th:only-of-type {\n",
                    "        vertical-align: middle;\n",
                    "    }\n",
                    "\n",
                    "    .dataframe tbody tr th {\n",
                    "        vertical-align: top;\n",
                    "    }\n",
                    "\n",
                    "    .dataframe thead th {\n",
                    "        text-align: right;\n",
                    "    }\n",
                    "</style>\n",
                    "<table border=\"1\" class=\"dataframe\">\n",
                    "  <thead>\n",
                    "    <tr style=\"text-align: right;\">\n",
                    "      <th></th>\n",
                    "      <th>Unnamed: 0</th>\n",
                    "      <th>Rating</th>\n",
                    "      <th>Reviews</th>\n",
                    "      <th>Size</th>\n",
                    "      <th>Sentiment_Polarity</th>\n",
                    "      <th>Sentiment_Subjectivity</th>\n",
                    "    </tr>\n",
                    "  </thead>\n",
                    "  <tbody>\n",
                    "    <tr>\n",
                    "      <th>count</th>\n",
                    "      <td>9659.000000</td>\n",
                    "      <td>8196.000000</td>\n",
                    "      <td>9.659000e+03</td>\n",
                    "      <td>8432.000000</td>\n",
                    "      <td>29697.000000</td>\n",
                    "      <td>29697.000000</td>\n",
                    "    </tr>\n",
                    "    <tr>\n",
                    "      <th>mean</th>\n",
                    "      <td>5666.172896</td>\n",
                    "      <td>4.173243</td>\n",
                    "      <td>2.165926e+05</td>\n",
                    "      <td>20.395327</td>\n",
                    "      <td>0.188836</td>\n",
                    "      <td>0.490848</td>\n",
                    "    </tr>\n",

```

```

"      <tr>\n",
"      <th>std</th>\n",
"      <td>3102.362863</td>\n",
"      <td>0.536625</td>\n",
"      <td>1.831320e+06</td>\n",
"      <td>21.827509</td>\n",
"      <td>0.355672</td>\n",
"      <td>0.266029</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>min</th>\n",
"      <td>0.000000</td>\n",
"      <td>1.000000</td>\n",
"      <td>0.000000e+00</td>\n",
"      <td>0.000000</td>\n",
"      <td>-1.000000</td>\n",
"      <td>0.000000</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>25%</th>\n",
"      <td>3111.500000</td>\n",
"      <td>4.000000</td>\n",
"      <td>2.500000e+01</td>\n",
"      <td>4.600000</td>\n",
"      <td>0.000000</td>\n",
"      <td>0.350000</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>50%</th>\n",
"      <td>5814.000000</td>\n",
"      <td>4.300000</td>\n",
"      <td>9.670000e+02</td>\n",
"      <td>12.000000</td>\n",
"      <td>0.157143</td>\n",
"      <td>0.514286</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>75%</th>\n",
"      <td>8327.500000</td>\n",
"      <td>4.500000</td>\n",
"      <td>2.940100e+04</td>\n",
"      <td>28.000000</td>\n",
"      <td>0.422500</td>\n",
"      <td>0.652500</td>\n",
"    </tr>\n",
"    <tr>\n",
"      <th>max</th>\n",
"      <td>10840.000000</td>\n",
"      <td>5.000000</td>\n",
"      <td>7.815831e+07</td>\n",
"      <td>100.000000</td>\n",
"      <td>1.000000</td>\n",
"      <td>1.000000</td>\n",
"    </tr>\n",
"  </tbody>\n",
"</table>\n",
"</div>"
],
"text/plain": [
"      Unnamed: 0      Rating      Reviews      Size  \\\n",
"count  9659.000000  8196.000000  9.659000e+03  8432.000000  \n",
"mean   5666.172896   4.173243  2.165926e+05  20.395327  \n",
"std    3102.362863   0.536625  1.831320e+06  21.827509  \n",
"min     0.000000    1.000000  0.000000e+00   0.000000  \n",
"25%    3111.500000   4.000000  2.500000e+01   4.600000  \n",
"50%    5814.000000   4.300000  9.670000e+02  12.000000  \n",
"75%    8327.500000   4.500000  2.940100e+04  28.000000  \n"

```

```

    "max      10840.000000      5.000000  7.815831e+07  100.000000  \n",
    "\n",
    "      Sentiment_Polarity  Sentiment_Subjectivity  \n",
    "count      29697.000000      29697.000000  \n",
    "mean        0.188836        0.490848  \n",
    "std         0.355672        0.266029  \n",
    "min        -1.000000        0.000000  \n",
    "25%         0.000000        0.350000  \n",
    "50%         0.157143        0.514286  \n",
    "75%         0.422500        0.652500  \n",
    "max         1.000000        1.000000  "
  ]
},
"execution_count": 33,
"metadata": {},
"output_type": "execute_result"
}
],
"source": [
  "df3.describe()"
]
},
{
  "cell_type": "code",
  "execution_count": 35,
  "id": "4cc07a15-4c91-4089-b22a-6850173fbdde",
  "metadata": {},
  "outputs": [
    {
      "name": "stdout",
      "output_type": "stream",
      "text": [
        "
                                Unnamed: 0      Rating      Reviews      Size  \\n",
        "Unnamed: 0      1.000000 -0.121690 -0.096690 -0.091735  \n",
        "Rating          -0.121690  1.000000  0.055081  0.063076  \n",
        "Reviews         -0.096690  0.055081  1.000000  0.179321  \n",
        "Size            -0.091735  0.063076  0.179321  1.000000  \n",
        "Sentiment_Polarity      NaN      NaN      NaN      NaN  \n",
        "Sentiment_Subjectivity  NaN      NaN      NaN      NaN  \n",
        "\n",
        "                                Sentiment_Polarity  Sentiment_Subjectivity  \n",
        "Unnamed: 0      NaN      NaN      NaN  \n",
        "Rating          NaN      NaN      NaN  \n",
        "Reviews         NaN      NaN      NaN  \n",
        "Size            NaN      NaN      NaN  \n",
        "Sentiment_Polarity      1.000000      0.272364  \n",
        "Sentiment_Subjectivity  0.272364      1.000000  \n"
      ]
    }
  ],
  "source": [
    "df_numeric = df3.select_dtypes(include=['number'])\n",
    "correlation_matrix = df_numeric.corr()\n",
    "print(correlation_matrix)"
  ]
},
{
  "cell_type": "markdown",
  "id": "7726elba-3ldb-46fd-b86c-baefb4b7e38d",
  "metadata": {},
  "source": [
    "#### Finding and Removing Outliers "
  ]
},
{
  "cell_type": "code",
  "execution_count": 64,

```


m/fee08PPvhgi/YHHnhA7733niTpwQcf1PHjx2+s0gAAG7qVLIjY3Vn/70pxbtf/rTn4z3hzQ1NcnpdN5YdQDQh
mnTphmfetrp37jWNgf526LbV48WLL5ubq80HDGj9+vBw0hz799F09+eabWrZsmaRr97izsrK6tFgA8Jefn2+sp/
FfQBxsHIDI0e19bt5++22tXbvWuPU0cuRILV68WA899JAK6dKLS8bTU+GEfW4A+2GfG8D+0vL9zSZ+ACytPfvYEHA
A6wvZJn6NjY06ffq0ampqAg4ACIWXNrJ+PzQQw+ptLTU0HyzyM3HAbC/Ts3cnDhxQo899liLRcVer1c0h0NXr17t
sgK7GjM3gH34z9oEm525Xj8A6+jI93enFhQvWLBa0dHR+s//E+lpKQE3a0YAADADJ0KN0e0HNHhw4clatSorq4HA
ADghnRqzc2tt96qc+f0dXUAtANah/u+vKyoqCujzP+c9d0Bk6dSam08++UQvvPCCfvnLX+q2225TTEXMqh84r2VhzQ
lgLzwtBUSGbn9aasqUKTpW4IBycnKUmJiofv36qV+/fkpISFC/fv3a/XPWrVunzMxMxcXFKS4uTtnZ2dq5c2eb15S
VLWns2LGKjY3VsGHDVFhY2JlFAYBNXC+4EGyAyN0pNTd79+7tkn94amqqXnnlFQ0fPlyS9NZbb+nee+9VRUWFMjIy
WoyvqqrSzJkztXDhQhUXF2vfn16+umnNXDgQM2d07dLagJgLdebuZk0aRIBB4gwYbeJX//+/fXqq6/q8ccfb9H3/
PPPa9u2bTp27JjRlpubq//93//V/v372/XzuS0F2Mc//dM/6eDBg5KkH//4x8rLyzP6fvWrX2nbtm2SpPHjx+vVv1
81pUYAXaNBHgU/evSoRo8erR49eujo0Antjs3MzGzvjzVcvXpV77//vi5evKjs70ygY/bv36+pU6cGtE2bNk0bNmz
Q5cuXW6z9kSSPxy0Px20cu93uDtCgIDz5go2kgGdj0/eFG/9xA0yv3eFmzJgxcrlcSkxM1JgxY+Rw0BRs0qejm/h9
/vnnys70VknDg/r06aMPP/xQt956a9CXLpdLSULJAW1JSUm6cuWkZp07p5SULBbXFBQUsDspAAARpN3hpqqqSgMHD
jQ+d5WRI0fqyJEjqqrU0LJiebPn6+ysrJWA07zDQN9Aau1jQTz8/MD/qJzu91KS0vrouoBAEC4affTUoMHDzYCRH
V1tW6++WYNHjw44Lj55ptVXV3doQJ69uyp4c0Ha9y4cSooKNDtt9+uX//610HHJicny+VyBbSdPxtW0dHRGjBgQNB
rnE6n8TSW7vBgD+PHjzc+/+pXvwro8z/3HwFA/jr1tNTkyZNVW1urxMTEgPb6+npNnjz5ht4t5fV6A9bI+Mv0ztbH
H38c0LZ7926NGzcu6HobAPb26quvGk9Lbdu2zVhjE2wcgMjRqX1ufC/Ib04vf/mLevf3e6fs2zZMv33f/+3Tp48q
c8//1zLly9XaWmp5s2bj+naLaVHHnnEGJ+bm6vq6mrl5eXp2LFj2rhxozZs2KCL5Sd25tcAYAPscw0guQ7N3Pzkjz
+RdG19y4IFC+R00o2+q1ev6ujRo/rhD3/Y7p/3zTff60GHH1Ztba3i4+0VmZmpXbt26Z577pEk1dbWqqamxhg/d0h
Q7dixQ88++6xee+01DRo0SGvWrGGPGwAAY0jQPjePPvqopGub7d1//3q1auX0dezZ08NGTJECxcu1He+852ur7SL
sM8NYC/NN/GLi4trseUDszeA9XXLPjeStGnTJknSkCFdHTp0g7dggKArrZx40bjc15enn784x8b59u2bTMWFW/cu
FGPPfZYy0sDYI6w26G4uzFzA9iH/6xNsNmZ6/UDsI5um7nx99vf/lbvffeampq1NjYGNd32WefdfbHAKCHtfYvut
69e+vixYshrgaA2Tr1tNSaNVw06K0PKjExURUVfFr+97+vAQMG6KuvvtKMGT06ukYAaFNrr1Uh2ACRqVPh5vXXX1d
RUZHWrL2rnj176rnnnt0ePXu0ZMkS1dfXd3WNABCU/1YRzfe48T/3HwFA/jq15uamm27SSWPHNHjwYCUmJmrPnj26
/fbbdeLECU2YMEF/+ctfuqPWLsGaG8Bemj8tFQzrbQDr68j3d6dmbpKTK40AM3jwYB04cEDStXd0Rdj6ZAAmYxM/A
M11KtzcfffdxmsQHn/8cT377L0655579Hd/93f627/92y4tEADacr2Zm/bM7ACwL049LVVUVKSmpjZJ116J0L9/f/
3xj3/U7NmzCTCAQmbr1q3G5+effz7ggYad03fq3/7t34xxDzzwQMjra2C0LtvnxuVyaEXKLXrzzTd16dKLrviR3YI
1N4B9sM8NEDm6bc1NXV2d5s2bp4EDBxrvdWpqatIvfvELffe739WBAwCdgwFgFAYMGBA0PaEhITQFgIgLHTottSy
ZctUXl6u+fPna9euXxr22We1a9cuNTQ0aMe0Hbrrrru6q04AaFvRt2jW1dWfthAAYaFDMzfbt2/Xpk2btGrVKm3bt
k1er1cjRozQJ598QrABEHK5ubnG5507dwb0+Z/7jwNgfX1acxMTE6Pq6moNGjRI0rX9bj799F0NHj262wrsaqy5Ae
yl+dNQQAQJLWzSG8DWF+3rblpampSTeYMcR4VFCWbwQGYqnlWIdgA6NCaG6/XqwULFsJpdEQSGhoalJub2yLgfPD
BB11XIQAKALAD0KNzMNz8/4PxnP/tZLxYDAB3V/LZudna29u/fH9DP7A0QWT0UbjZt2tRddQbH3366afG5zVr1igz
M9M4P3r0qJYsWWKM+/73vx/y+gCYo10vXwCACPDcc88Zn/2DTfNZ/3EA7I9wA8Dysr0zg7aPGzcuxJUAeEGwCW5
7/Gxt+hQ4dCXAmAcEC4AWBZ//7v/258Pnr0aECf/7n/0AD216m3ggNA0PBfJ0xbPHY9cQDsJ5kbAJZ2vce8eQwciD
yEGwCW1nyfm472A7AfbsBsKwDBw4Yn1evXq0xY8YY50e0HNEzzxjJswYUKIqWNgFmZuAfjWP//zPxuf/YNN83P
/cQDsJ3ADwPJawZCclZUV4koAhAPCDQDL838Ng7+KiooQVwIghBBuAFjWK6+8Ynw+cuRIQJ//uf84APbHgmIALuW/
SNI3ePh64wDYN6kzNwJFBRo/frz69u2rxMREzZkzR8ePH2/zmtLSUjkcjhZHZWVliKoGEE7Y5wZAc6aGm7KyMilat
EgHDhzQnj17d0XKFU2d0LUXL1687rXHjx9Xbw2tcXzve98LQcUAwg373ABoztTbUrt27Qo437RpkxITE3X48GFnnD
ixzWsTEx0VkJDQjdUBCHF+62oKcws1atQo47yyslK5ubnGu0aPig0wr7BaUFxfXy9J6t+/3XHZmVLKSULRTk50dq
7d2+r4zweJ9xud8ABwB7819n4B5vm522txwFgP2ETbrxer/Ly8vSjH/1Io0ePbnVcSkqKioqKVfJSog8++EAjR45U
Tk60ysvLg44vKChQfHy8caSlpXXXrWDAJDk50UHbrzcDDMcHEf6v12t2EZK0aNEibd++XX/84x+VmpraoWtnz54th
80hbdu2tejzeDzyeDzGudvtVlpamurr6xUXF3fDdQMwj/96mmALh6/XD8A63G634uPj2/X9HRYzN4sXL9a2bdu0d+
/eDgcb6dpjnid0nAja53Q6FRcXF3AAsIfvq1cbn5s/Mel/7j80gP2ZuqDY6/Vq8eLF+vDDD1VaWqqhQ4d26udUVFQ
oJSWli6sDE078Fwn7Fg9PnDixxw1qFhMDkcXUcLNo0SK98847+t3vfqe+ffvK5XJJkuLj49WrVy9JUn5+vs6c0aMt
W7ZiuvYX2JAhQ5SRkaHGxkYVfXerpKREJSULpv0eAmXTwloacPuebdhdhQqEuwNN+vWrZPUch+KTZs2acGCBZKk2
tpaldTUGH2NjY1aunSpzpw5o169eikjI0Pbt2/XzJkzQ1U2AAAIY2Gz0dH0U0rIgCUD4a/7H0bRp0/T73/8+oI3ZG8
D60vL9zbulAFjW0aNHjC9FRUUAuMwKEpGu3s7/88ks98cQTxrjMzEXtGzQqemHxtBQADMaSJUuM75gE+zcfxwA+yP
cALC8ad0mbW2//+67Q1wJghBAuAFgec3X2Ph88sknIa4EQDgg3ACwrdVr1hiFv/zyy4A+/3P/cQDsJwXfACZL5fGw
b/Hw9cYBSd9mbgBY2vUe8+YxcCDyEG4AWFrzfw462g/AfrgtBcCyjhw5YnwuLCzUqFGjJPPKykrjfvNHjhzh/VJAB
GHmBoBLPfPMM8Zn/2DT/Nx/HAD7I9wAsLycnJyg7RMnTgxxJQDCAeEG0X913/9V9D25m8IBxAZCDcALGv16tXG58
rKyoA+/3P/cQDsJwXfACZL5fGwb/HwxIkTw8zYsJgYiCzM3ACwt0b72DQPNuxzA0Qewg0AALAVwg0AS/PfpC8qKko
PP/ywoqKigvYDiAysuQFgWX/+85+Nz8XFuPNTZUKPf744zp9+rR+9r0fGe0GDx9uSo0AQo+ZGwCwTXDhQknXZmx8
wcYnNTXVMHxjQMKGQg3AcZL6/VKkh566KGg/ffdd1/A0ACRGXADwLiCdock6Z133gna//777weMAXZCDcAL0uNN
96QJF29eLwNT5806Dt9+rSuXr0aMA5AZGBBMQDL8l8k7Fs87HA4WtyGYjExEFmYuQFgac036WsebnJED4g8hBsAlj
Z9+vQb6gdgP9yWAmBZLpdLDQ0NkqSPPvpICQkJRl9dXZ3mzJmjoYGuVwuJScnm1QlgFBj5gaAZT311F0Sp0Tk5IB
gI0kJCQlGoPGNAXAZCDcAL0vChQuSpCeffDJo/+0PPx4wDkBBkINwAsKw+ffpIktavXx+0f80GDQHjAEQWg0Ay1q3
bp2ka2tv6urqAvrq6urkcrkCcxGIDCwoBmBZycnJio2NVUNDg+bMmRN0TGxsLIuJgQhJ6sxNQUGBxo8fr759+yoxM
VFz5szR8ePhr3tdWVmXzo4dq9jYWA0bNkyFhYUhbZa0Nq1a9cN9Q0wH1PDTVLZmRYtWqQDBw5oz549unLliqZ0na
qLFy+2ek1VVZVmzpyo++8UxUVFvq2bJmWLFmipKSEFY0IFxMnjw54Lz5e6Sa9w0wP1NvSzX/i2rTpk1KTEzU4c0
HNXHixKDXFBYWKj09XatXr5Yk3XLLLTP06JBWrvqlXpndnfJAMLIyZMnjR2Jt27dGnD7yeVy6YEHHPDX69XJkyc1
ZMgQk6oEEGphtaC4vr5ektS/f/9Wx+zfv19Tp04NaJs2bZo0HTqky5cvtxjv8XjkdrSDdG24HvU2+l0tLhXk5ycL
KfTGLA0QGGIm3Dj9XqVl5enH/3oRxo9enSr41wvLSKsKlqkLpKSD0XKFZ07d67F+IKCAsHXhxtHwLpal9c0wBy+t3
4vWTAgaP+8efMCXgGIDGETbv7H/5BR48en8lbbvvvnd3vqfumpZu3S1J+fr7q6+uN49SPU11TMADTRUVF5Z12b94
ctP/tt980GAcgMoRfUfM8eLG2bdumvXv3KjU1tc2xycnJxt4VPmfPnlV0dLQGDBjQYrzT6VRcXfZAACeAfJv0eTye
Fv9ecLlc8ng8AeMARAZTFxR7vV4tXrxYH374oUpLSzV06NDRxp0dna2PP/44oG337t0a26cYmJiuqtUAGFoyJAhc
jgc8nq9euCBB+R00jVv3jy9/fbbRrBx0BwsJgYijKkzN4sWLVJxcbHeeecd9e3bVy6XSy6XS5cuXTLG50fn65FHHj
H0c3NzVV1drby8PB07dkwbN27Uhg0btHTPuJn+BQAm27t3r3FL2uPxa0PGjQHBZu/evWaWB8AEpoabdevWqb6+XpM


```

{
  "name": "stdout",
  "output_type": "stream",
  "text": [
    "Original dataset shape: (8196, 18)\n",
    "Dataset shape after removing outliers: (7704, 18)\n"
  ]
},
{
  "source": [
    "Q1 = df3['Rating'].quantile(0.25)\n",
    "Q3 = df3['Rating'].quantile(0.75)\n",
    "\n",
    "IQR = Q3 - Q1\n",
    "\n",
    "lower_bound = Q1 - 1.5 * IQR\n",
    "upper_bound = Q3 + 1.5 * IQR\n",
    "\n",
    "df_outliers = df3[(df3['Rating'] >= lower_bound) & (df3['Rating'] <=
upper_bound)]\n",
    "\n",
    "print(\"Original dataset shape:\", df3.shape)\n",
    "print(\"Dataset shape after removing outliers:\", df_outliers.shape)"
  ]
},
{
  "cell_type": "code",
  "execution_count": 68,
  "id": "f0e32cde-568f-478d-9ae4-b7a0bb2dd0ee",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "image/png":
"iVBORw0KGgoAAAANSUHEUgAAA1cAAAH7CAYAAAAgg2VMAAAA0XRFWHRTb2Z0d2FyZQBNYXRwbG90bGliIHZlcnNp
b24zLjguMCwgahR0cHM6Ly9tYXRwbG90bGliLm9yZy81sbWrAAAACXBIWMAAA9hAAAPYQGoP6dpAAA9f0lEQVR4n
03de1xVZd7///c2YMK0zUVTMQ8oKKSZwEnywdLQ+PcZlqjJKbjrTmTWT7qxsM6UB2GI9lYSaZE2iDpk1qaoneTW
hoUt6NqU0qjokmJVsttwnr94c/9tctBwEv3CKv5+0xHrmufa21PtDy24M361pr2SzLsgQAAAAAuCK1vF0AAAAAAFW
PCFcAAAAAYADhCgAAAAAMIFwBAAAAGAGEKwAAAAAwgHAFAAAAAYQrgAAAADAAMIVAAAAABhAuAIAAAAAAwhXAK5L
KSkpstls7qV27doKDg7W/ffff3379lV6vy+88II++0CDYu0ZGRmy2WzKyMiofNGVVHTsosXX11eNGjVS79699ec//
1kHDx4stk3R+Tlw4ECFjLXa+MtS0rHuu0M0dezYsUL7uZwla9bomWeeKfGzFiLaKCEhweJxqLJCQoJatGjh0VbauS
86v9u3b786xV3kyJEjeuaZZ5SdnV2h7Xbv3q2EhAQ1b95cvr6+uummmzRgwAcTxbv2iup5/fXXlZKSUqz9wIEDstl
sHp9V9t8AAJSFcaXgurZ48WJlZmZq48aN+uMf/6jVq1frN7/5jX766adK7a+0H3C7du2qzMXmDe3a9QorrrwXXnhB
mZmZ2rRpkxYtWq77rhDb7/9ttq3b6+//e1vHn0HDhyozMxMBQcHV/gYFQ1XlTlWRa1Zs0YzZswo8b0VK1dq2rRpV
Xp8k6Znm6aVK1d6tFXm3Fe1I0e0aMaMGRUKVytwrFCXlL30xRdfanQ0adq4caMWLFggSRowYICeeOKJStdTWRgqyd
X6XgKoWp7uAAQeod03ZU9+7dJV24WlJQUKdp06frgw8+00jRo40dJzAwUJGRkcb2Vxlt2rTxq0G3v/2tHn/8ccX
GxioHPUERERHq1KmTJKlRo0Zq1KhRlDbzyy+/yM/P76oc63K6d0nileNXVKtWrbxdQpX497//rfj4eHXq1EkZGRmq
W7eu+7P77rtPEyZM0Msvv6yuXbvq/vvvr9JaT8vf/75Z9WpU8fY/gBUT1y5AlCjFAWto0ePutv0nj2rxx9/XJ07d
5bD4VCDBg0UFRwLVatWeWxrs9l05swZvfP00+4peHfccYekkqcFJiQkqF69evruu+80YMAA1atXTyEhIXr88cflcr
k89v2f//xHQ4c0VUBAgG688UaNGDFCWlZxaYyVVSDBg305ptv6vz585o1a5a7vaQpUTt37tSgQYPUuHFj2e12NW3
aVAMHdTr//v0fy46/aH/r16/XQw89pEaNgql0nTpyuVxLTr/63//9X0VGRsrF318333yzpk2bpoKCAvfnP023vHsa
V0JCgl577TV3nUvL0TFLmhaYk50jkSNHusfbvn17vfrqqyosLCx2nFdeeUV//etfcdstt6hevXqKiorS1qlbyzz3T
qdTtWvX1ssvv+Xu0378uGrVqiWHw6Hz58+72x955BE1atRIlmW5x3PxtMCyzn2RU6d0acKECbrpppvUsGFDDRkyRE
e0HPHoU1hYqJdeeknt2rWT3W5X48aN9eCDD7r/jouUNo3yjjvu8Pj09+jRQ5I0evRod12lTc2UpFmzZunnn3/WvHn
zPIJvKvDffvU33nijnn/+eXfbM888I5vNVqzvpd+rFila6JtvvtHmzZvdtVw6tbKs7Yts3LhRMTEcGwMVJ06ddS7
d2998sknHn2Kavryyy81d0hQ1a9f3x2Iv//+e91///lq2rSp7Ha7mjRpopiYmApPnQRQPRGuANQo+/fvlySFhYW52
1wul3788UdNmTJFH3zwgVJTU/Wb3/xGQ4YM0ZiLS9z9MjMz5e/vrwEDBigzM10ZmZl6/fXXyzz7/+qt/+9reKiY
nRqlWr9NBDD2nWrFma0X0mu8+ZM2fUt29fbdq0STNztTy5cvVpEkTDR8+3MiYe/TooedgYG3ZsqXUPmf0nFFcXJy
0Hj2q1157TRs2bNDs2bPVvHlznTp1qtzjf+ihh+Tj46N3331Xf//73+Xj41PqMfPy8nT//fdrxIgrWrVqLYY0Harn
nnt0kyZNqvAYp02bpqFdH7rrLFpKm/Llw8/KDo6WuvXr9ezzz6r1atXKzY2Vl0mTNEf//jHYv0vPid/+9vfd0bMG
Q0YMED5+fml1hQYGKgePXp048aN7rZPPvLEdrtdp06d0hdf0Fu37hxo+68884SQ0TRmC537se0HsFhX+99957eu
mll5SRkaGRI0d69JkwyYKefPJJxcXfXq1Xr22We1bt06RUdH6/jx46W0pSRdu3bV4sWLJULPPfWUu066xY8eWus2
GDRvUpEmTUq/y1qlTR/369dP//d//KS8vr0L1rFy5Ui1btLSL3ctVw6tfJyLi5dnq79+ikwMFDvvP00Li9frgYN
Guuu+4qFrAkaciQIWrdrXef/99vfHGG5IuTG3csW0HXnrpJW3YsEELFixQly5ddPLkyQrVAqB6Ylogg0taUGBz
p8/r7Nnz+qf//ynnnvu0fXp00e//e1v3X0cDof7h8SibWJiYvTTTz9p9uzZevDBByVJkZGRqLwrlho1a1TuKYDnZp
3TjBkzdN9990mSYmJitH37dr333nt6+umnJUnvvP00vvvu061du1Z33323JKlFv376+eef9eabbxo5D82bN9fXX39
d6ufffvutPw4oUWLFmnw4MHu9mHDhrn/XJ7xx8TEllvmEyd0aNWqVe6/i379+umXX37RggUL9MQTT6h58+b12o90

```

YRpdkyZN3HVeZl//+lcdPnxY27ZtU8+ePSVJd911lwoKCvTGG2/o0Ucf9QjgAQEB+sc//qEbbrrhBktS0aVP17NlTa
9euLXP6WmxsrF599VW5XC7Z7XZt3LhRd9xxh44c0aKNGzcq0jpaR44c0e7duzV58uRS910ec3/33Xdr7ty57vUff/
xRTzzxhPLy8hQUFKRvv/1WycnJevjhzhVv3jx3vy5duqhXr16aNWuWxxWjywkMDHQ/LKRVq1b10u850Tnq3LlzmX1
uueUWd9+goKBy190Lsxf5+/tXeoruzz//rEmTJmnQoEEeoWzAgAHq2rWrpk6dqm3bbtnlsM2rUKI/7/E6c0KE9e/Zo
9uzZHSF2yJAhFa4HQPxELsSAl7XIyEj5+PgoICBA999t+rXr69Vqlapdm3P3y29//77627t+rVq6fatWvLx8dHi
xYt0u7du6/o+DabTffcc49HW0REhMcT/DZv3uyu72IPPPDAFR37YkXTzUrTunVr1a9fX08++aTeeOMN/etf/6rUce
69995y9w0ICPAIUzL0+9//XoWfHwVeZTPH008/VXh4uDtYFULISJBLwfr000892gc0H0g0VtKFv0NJJT6J8WIXMTH
65Zdf9Pnnn0u6cIUQLi50sbGx2rBhg7tNuhDErsS15/LSGjdt2iRJxab79ezZU+3bty/xyow3FH1XS7uKV1U+//xz
/fjjjxolapT0nz/vXgoLC3X3XcrKytLZ86c8djm0u97gwYN1KpVK7388sv661//qp07d3pMMwVw/SNcAbiuLVmyR
FLZWfr000/13//939q9e3ex0LJixQoNGzZMN998s5YuXarMzExLZWxPoYce0tmzZ6/o+HXq1JGfn59Hm91u99jviR
Mn3FddLLZSW2X150SoadOmpX7ucDi0efNmde7cWV0nTLWHDh3UtGLTTZ8+Xb/++mu5j10RJ6+VNL6iKxUnTpwo934
q48SJeyXWwnS0Lj1+w4YNPdbtdrukCw/tKEt0dLTq1KmjRs36rvvvt0BAwfc4Wrbtm06ffq0Nm7cqJYtW7qv2FTW
5WosGLNp467qcy5duIJaNDW3NEX3QIWEhFR5PRcrug9z6NCh8vHx8Vhmzpwpy7L0448/emxz6bm02Wz65JNPdNddd
+mll15S165d1ahRiZ3yyCPu6bUArm9MCwRwXwvfv37IRZ9+/ZVQUGB3nrrLf397393360zd0LS3XLLLvq2bJnHb8
svfehEVWnYsKHH/TdFKnrPSWm++0IL5eXlacyYMWX269Spk9LS0mRZl7++mulpKToL3/5i/z9/fu//M/5TpWRa4
2XPxQkSJFYy4KCKXB9NK/i4reH3Sphg0bKjc3t1h70QMgbrppivafxfFX1/95je/0caNG9WwMTMBQWpU6d0atmy
paQLD4X45JNPNgJQICPHK0vR0c3NzVWzS08Pjty5IjHmP38/Er8/h8/fvyKzk1cXJxee+01bd26tcSpez//LM2b
Nigjh07uoP2xd+BosBYVITJRe0aN29eqdMKL/2FQEnf99DQUC1atEiStHfvXi1fvlzPPP0Mzp07574vC8D1iyTAXG
qUL156SfXr19fTTz/tnq5T90Ldi39QysvLK/a0Q0nC1YDLXa2oqNtvv12nTp0q9gLvtLS0K973jz/+qPHjx8vHx6f
Me3ouZrPZd0utt2rWrFm68cYb9eWXX7o/Mzn+U6d0afXq1R5t7733nmrVqqU+ffpIkvtpb5feL3bpdkW1SZe/miRd
mK73r3/9y2Ns0oUrnTabTX379i330C4nNjZW03bsUHP6unvqX926dRUZGal58+bpYJEj5ZoSeKXn/s4775R04ZcJF
8vKytLu3bsVEXpjbmvRokWxc753717t2b0nWE1S+c65JE2ePFn+/v7605/+VGyKnSRNmTJFP/30k5566imPWqTi34
EPP/yw2PZXco569+6tG2+8Uf/617/UvXv3EhdfX98K7TMSLExPPfWU0nXqV0y7BuD6xJUArADVk/fr1LZiYqCeeeEL
vvfeeRo4cqUGDBmnFihV6+0GHNXToUB06dEjPPvusgo0DtW/fPo/ti97P8+GHHyo40FGBAQFq27btFdU0atQozZo1
SyNHjtRzzz2n1qlba+3atfr4448LSbVqle/3YPv27dPWrVtVWFioEyd0aNU2bVq0aJGcTqeWLfmiDh06LrtP/7xD
73++uv63e9+p5YtW8qyLK1YsUInT55UXFxcLYy/Yc0GmjBhgnJychQWFqY1a9Zo4cKfmjBhgvthFkFBQYqNjVVSUP
Lq16+v0NBQffLJJ1qxYkwx/RW9w2vmzJnq37+/brjhbKVERJT4A/HkyZ01ZMkSDRW4UH/5y18UGhqqjz76SK+//ro
mTJjg8TCLKxUTE60CggJ98skneuedd9ztsbGxmj59umw2mzv4l0VKz33btm01btw4zZs3T7Vq1VL//v114MABTZs2
TSEhIR7h0z4+XiNHjtTDDz+se++9VwcPHtRLL71U7L1QrVq1kr+/v/72t7+pffv2qlevnpo2bVrqFNRWrVrp3Xff1
YgRI9SjRw899thjatu2rY4ePaq3335ba9euLZ0pUzyeLDlgwAA1aNBAY8aM0V/+8hfVrl1bKskpOnToUInnKC0tTc
uWLRPLl13l5+fn/L5cTr169Trv3jyNGjVKP/74o4Y0HarGjRvrhx9+0FdfFaUffvjB/blj0nz99df64x//qPvuu09
t2SRRL6+vPv30399df1vv0LoJqzA0A6thYKysUkSLZWVeyzX375xWrevLnVpk0b6/z585ZLWdaL750tWjRwrLb
7Vb79u2thQsXWtOnT7cu/d9kdna21bt3b6t0nTQWJ0v222+3LMuyNm3aZEmyNm3a5047atQoq27dusW0X9J+c3Jyr
CFDhlj16twZAgICrHvvddas2aNJclatWpVmWMT0nbRurt2bathw4ZWVFSUNXXqV0vAgQ0Lnp/9+/dbLmVZ3377rf
XAAw9YrVq1svz9/S2Hw2H17NnTSklJKdf4yzrflx7Lsizr9ttvtzp06GBLZGRY3bt3t+x2uxUCHGxNnTrv+vXXXz2
2z83NtYY0Hwo1aNDacjgc1siRI63t27dbkqzFixe7+7lcLmvs2LFWo0aNLJvN5nHM0NBQa9SoUR77PXjwoPX73//e
atiwoeXj4201bdvWevnl62CggJ3n/3791uSrJdffrnYuCRZ06dPL9Z+qcLCQuumm26yJFmHDx92t//zn/+0JFLdu
3Ytts2oUa0s0NBQj7aKnvuSvpMFBQXWzJkzrbCwMMvHx8e66aabrJEjR1qHDh0qVvNLL71ktWzZ0vLz8706d+9uff
rpp9btt9/uPm6R1NRUq127dpaPj0+5z8k333xjjRo1ymrWrJnL4+NjNwjQwLr77rutjz76qMT+X3zxhRUDHW3VrVv
Xuvnm63p06dbb731VrHv1YEDB6x+/fpZAQEBLiT30S26e7z4+1LS99KyLGvz5s3WwIEDrQYNGlg+Pj7WzTffba0c
0NB6//333X2K/g3/8MMPHtsePxRUSKhIsNq1a2fVrVvXqlevnhUREWHNmjXL/f8aANc3m2Vd5hFSAACveOGFF/TUU
08pJyen2D0yAAdg2s00QAC4BsyfP1+S1K5d0/3666/69NNPNXfuXI0c0ZJgBQBANUG4AoBrQJ06dTRr1iwd0HBALp
dLzZs315NPPulxYz8AALI2MS0QAAAAAAZgUewAAAAAYADhCgAAAAAMIfwBAAAAGAE80KIEhYWF0nLkiAICAmSz2bx
dDgAAAAAvsSxLp06dU0mTVWrVtnXpgHXJThy5IhCQkK8XQYAAACAA8ShQ4cu+3oUwLlUJAgICJF04gYGBgV6uBgAA
AIC30J10hYSEuDNcwQHxJSiaChgYGEi4AgAAAFcu24V4oAUAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIfwBA
AAAGAGEKwAAAAAwghAFAAAAAAYQrgAAAAADAAMIvAAAAABhAuAIAAAAAAwHAAAAAGAA4QoAAAAADCBcAQAIAABhC
AAAAAGMmC4eqZ256RZwbZWiKcgrcZvPmzrWvZ8/PzUhmLVfHGG8X6pKenKzW8XhA7XeHh4VbQVEAAAA
AJF0DV646d0ig3Nxc97Jr165S++7fv18DBgzQbbfdpp07d2rqlK165JFHLJ6e7u6TmZmp4c0HKz4+xl999ZXI4+M1
bNgwbdu27WoMBwAAAAEANZbMsy/LWwZ955h198MEHys70Llf/J598UqtXr9bu3bvdbePHj9dXX32lzMxMSdLw4cPlD
Dq1du1ad5+7775b9evXV2ppqarm043Q65XA4LJ+fr8DAwPIPCAAAAMB1pSLZoPZVqqlU+/btU90mTWw329WrVy+98M
ILatmyZYL9MzMz1a9fP4+2u+66S4sWLdKvv/4qHx8fZWZmavLkycX6zJ49u9QaXC6XXC6Xe93pdFZ+QACq3NmzZ5W
Tk+PtMgDAuObNm8vPz8/bZQCoJK+Gq169emnJkiUKCwvT0aNH9dxzzyk60lrffPONGjZsWkX/Xl6emjRp4tHwPEKT
nT9/XsePH1dwCHCpffLy8kqtIykpSTNmZDAZKABVLicnR+PgjfN2GQBgXHJySSLCwrxdBoBK8mq46t+/v/vPnTp1U
lRULFq1aqV33nLHjz32WInb2Gw2j/WiWY0Xt5fU59K2iyUmJnocz+l0KiQkpPwDAXBVNW/eXmNjyd4uAzXAwYMH9f
zzz+vPf/6zQkNDvV00aoDmzZt7uwQAV8Dr0wIvVrduXXXq1En79u0r8f0goKBiV6COHTum2rVru690ldbn0qtZ7F7P
b7bLb7VdYPYCrxc/Pj9/s4qoKDQ3l0wcAuCyvPy3wYi6XS7t371ZwcHCJn0dFRWnDhg0ebevXr1f37t3L4+NTZp/o
60iqKR0AAAAA50VwNWXKFG3evFn79+/Xtm3bNHToUDmdTo0aNUrShel6Dz74oLv/+PHjdFdGQT322GPavXu33n77b
SlatEhTpkxx95k0aZLWrl+vmTnn6ttv9XMmT01ceNGPfroo1d7eAAAAABqEK+Gq//85z964IEH1LZtWw0ZMKs+vr
7aunWre157bm6uxxPBbrnLfQ1Zs0YZGRnq3Lmzn32Wc2d01f33nuvu090dLTS0tK0ePFiRUREKCUlRcuLV0vXr2
u+vgAAAAA1Bxefc/VtYr3XAEAJGnv3r0aN24cT3ADgBqsItngmrrnCGAAAAACqK8IVAAAAABhAuAIAAAAAAwHAAAA
AGAA4QoAAAAADCBcAQAIAABhCsAAAAAMIbWbQAAAAAGKE4AAAAAwADCFQAAAAAYQLgCAAAAAAMIvAAAAABgAOEKA
AAAAAwgXAEAAACAAAYQrAAAAADACAUAAAAABhCuAAAAAAAwHAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIv
BAAAAAGAGEKwAAAAAwghAFAAAAAAYQrgAAAAADAAMIvAAAAABhAuAIAAAAAAwHAAAAAGAA4QoAAAAADCBcAQAIAA
BhCsAAAAAMIbWbQAAAAAGKE4AAAAAwADCFQAAAAAYQLgCAAAAAAMIvAAAAABgAOEKAAAAAAwgXAEAAACAAAYQrAAAA
ADCAcAUAAAAABhCuAAAAAAAwHAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIvBAAAAGAGEKwAAAAAwghAFA
AAAAAYQrgAAAAADAAMIvAAAAABhAuAIAAAAAA66ZcJWULCSbzaZHH3201D4JCQmy2WzFlg4d0rj7pKSkLnjn7NmzV2
EUAAAAAGqq2t4uQJKysrKUnJysiIiIMvvNmTNHL774onv9/PnzuvXWw3Xfffd59AsMDNSEpXs82vz8/MwVDAAAAAAC

X8PqVq90nT2vEiBFauHCh6tevX2ZfH80hokAg97J9+3b99NNPgj16tEc/m83m0S8oKKgqhWAAAAAA3g9XEyd01MCB
AxUbG1vhbRctWqTY2FiHoZ6tJ8+fVqhoaFq1qyZBg0apJ07d5a5H5fLJafT6bEAAAAAQEV4NVylpaXpPy+/VFJSU
oW3zc3N1dq1azV27FiP9nbt2ikLJUWrV69Wamqq/Pz81Lt3b+3bt6/UfSULJcnhcLiXkJCQCtCDAaaaGbzWrg6d0
iQJk2apKVLl1bqfqiULBTde00N+t3vfufRHhkZqZEjR+rWw2/VbbfdpuXLlyssLEzz5s0rdV+JiYnKz893L4c0Hap
wPQAAAABqNq890GLHjh06duyYunXr5m4rKCjQli1bNH/+fLlClt1www0lbmtZlt5++23Fx8fL19e3z0PUqlVLPXr0
KPPKld1ul91ur9xAAAAAAEBDFcxMTHatWuXR9vo0aPvRl07Pfnkk6UGK0navHmzvuvu040ZM+ayx7EsS9nZ2erUq
dMV1wwAAAAApfFauAoICFDHjh092urWrauGDRu62xMTE3X48GEtWbLEo9+iRYvUqlEvYttL0owZMxQZGak2bdrI6X
Rq7ty5ys701muvvVZ1gwEAAABQ410T77kqTW5urnJycjza8vPzLZ6erjLz5pS4zcmTjZVu3Dj15eXJ4XCos5cu2rJ
li3r27Hk1SgYAAABQQ9ksy7K8XcS1xul0yuFwKD8/X4GBgd4uBwDgJXv37tW4ce0UnJyssLAwb5cDAPCCimQDr7/n
CgAAAAACuB4QrAAAAADCAcAUAAAAABhCuAAAAAMAAwhUAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIFwBAAAAg
AGEKwAAAAAwgHAFAAAAAYQrgAAAAADAMIVAAAAABhAuAIAAAAAAwHxAAAAAGAA4QoAAAAADCBcAQAIIABhCsAAA
AAMIBwBQAAAAAGEK4AAAAAwADCFQAAAAAYQLgCAAAAAAMIVwAAAAABgA0EKAAAAAwgXAEAAACAAYQrAAAAADCAcAU
AAAAABhCuAAAAAMAAwhUAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIFwBAAAAgAGEKwAAAAAwgHAFAAAAAYQ
rgAAAAADAMIVAAAAABhAuAIAAAAAAwHxAAAAAGAA4QoAAAAADCBcAQAIIABhCsAAAAAMIBwBQAAAAAGEK4AAAAAw
ADCFQAAAAAYQLgCAAAAAAMIVwAAAAABgA0EKAAAAAwgXAEAAACAAYQrAAAAADgmgLXSULJstlsevTRR0vtk5GRIZ
vNVmz59ttvPfq1p6crPDxcRtd4eHhWrlYzRVXDwAAAKCmuybCVVZWLpKTKxUREVGu/nv27FFubq57ad0mjfuzzMx
MDR8+XPHx8frqq68UHx+vYc0Gadu2bVVVPgAAAAAB4P1ydPn1aI0aM0MKFC1W/fv1ybd04cWMFBQW5LxtuuMH92ezZ
sxUXF6fEXes1a9d0iYmJiomJ0ezZs6toBAAAAABwDYSriRMnauDAgYqNjS33Nl26dFFwclBiYmK0adMmj88yMzPvR
18/j7a77rpLn3/+uZF6AQAAAKaktb158LS0NH355ZFkysoqV//g4GALJyerW7ducrlcevfdxUTE60MjAz16dNHkp
SXl6cmTZp4bNekSRP15eWvul+XyyWxy+VedzqdlRgNJ0no0aPKz8/3dhkAYMTBgwc9/gsA1w0Hw1Hs52WY4bVwdej
QIU2aNEnr16+Xn59fubZp27at2rZt616PiorSoU0H9Morr7jdlSTZbDaP7SzLkTz2saSkJM2YMa0CI8Cljh49qpHx
D+rXc67LdwaAauT555/3dgkAYIyPr11L311CwKoCXgtX03bs0LFjx9StWzd3W0FBgbZs2aL58+fL5XJ53EtVmsjIS
C1dutS9HhQUV0wqlbFjx8r88iQmJuqxxx5zrzudToWEhFrk0JCUn5+vX8+59EvL21Xo5/B20QAAALhErbP50veblZ
+fT7iqAl4LVzEXmdqla5dH2+jRo9WuXTs9+eST5QpWkrRz504FBwe7160iorRhwwZNnjzZ3bZ+/XpFR0eXug+73S6
73V7BEaA0hX40Fda9ydtLAAAAAFv18JVQECA0nbs6NFWt25dNWzY0N2emJiow4cPa8mSJZiUPAmwRYSw6tChg86d
06elS5cqPT1d6enp7n1MmjRJfFR00cyZmZv48GCTwRVKGzdu1GeffXb1BgCAACgxvHqAy0uJzc3Vzk50e71c+f0a
cqUKTp8+LD8/f3VoUMHffTRRxowYIC7T3R0tNLS0vTUU09p2rRpatWqlZYtW6ZevXp5YwgAAAAAgibZvMwT4u41j
idTjkcDuXn5yswMNDb5VQbe/fu1bhx43Qm/LdMCwQAALgG1TpzXHX/tVrJyckKCwvzdjnvQkwygdfcWUAAAAA1wP
CFQAAAAAYQLgCAAAAAAMIVwAAAAABgA0EKAAAAAwgXAEAAACAAYQrAAAAADCAcAUAAAAABhCuAAAAAMAAwhUAAAA
GEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIFwBAAAAgAGEKwAAAAAwgHAFAAAAAYQrgAAAAADAMIVAAAAABhAuAIA
AAAAwhXAAAAAGAA4QoAAAAADCBcAQAIIABhCsAAAAAMIBwBQAAAAAGEK4AAAAAwADCFQAAAAAYQLgCAAAAAAMIVw
AAAAABgA0EKAAAAAwgXAEAAACAAYQrAAAAADCAcAUAAAAABhCuAAAAAMAAwhUAAAAAGEC4AgAAAAADCFcAAAAAYAD
hCgAAAAAMIFwBAAAAgAGEKwAAAAAwgHAFAAAAAYQrgAAAAADAMIVAAAAABhCu29sF4PpT65eT3i4BAAAAJedntKpF
uIJx/vu3eLSAAAA4KojXMG4X27po0L/G71dBgAAAC5R65eT/CK8ChGuYFyh/40qrHuTt8sAAAAArioEAEEAAAAAB
hCuAAAAAMAAwhUAAAAAGEC4AgAAAAADCFcAAAAAYMA1E66SkpJks9n06K0PltpnxYoViouLU6NGjRQYgKioqCh9/P
HHHn1SULJks9mKLWfPng3iEQAAAACoya6JcJWVlaXk5GRFRESU2W/Lli2Ki4vTmjVrtGPHDvXt21f33H0Pdu7c6dE
vMDBQubm5Houfn19VDgEAAABADef191ydPn1aI0aM0MKFC/Xcc8+V2Xf27Nke6y+88IJWrvqLdz/8UF26dHG322w2
BQUFVUW5AAAAFAir1+5mjhxogYOHKjY2NgKb1tYWKhtP06pQYMGHu2Nt59WaGiomjVrpKGBDhW7snUpl8slp9Pps
QAAAABARXg1XKWlpenLL79UULJSpbZ/9dVXdebMGQ0bNsZdlq5d06WkpGj16tVKtU2Vn5+fevfurX379pw6n6SkJD
kcDvcSEhJSqXoAAAAA1FxeC1eHDh3SpEmTtHTP0krdD5WamqpnnnLgy5YtU+PGjd3tkZGRGjlypG699VbdddttWr5
8ucLCwjRv3rxS95WymKj8/Hz3cuJqOoUqNCQAAAEDN5bV7rnbs2KFjx46pW7du7raCggJt2bJF8+fPl8vL0g033FDi
tsuWld0YMWp0/vvvX3Y6Ya1atdSjR48yr1zZ7XbZ7fbKDQAAAAA5MVwFRMT0127dnm0jR49Wu3atd0TTz5ZarBKT
U3VQw89pNTUVA0c0PCyx7EsS9nZ2erUqZ0RugEAAACgJF4LVwEBAerYsaNHw926ddWwYUN3e2Jiog4fPqwlS5Ziuh
CsHnzwQc2ZM0eRkZHKy8uTJPn7+8vhcEiSZsyYocjISLvp00Z0p1Nz585Vdna2Xnvtas40gAAAAA1jdefliW3Nx
c5eTkuHffPNNnT9/XhMnTLRwCLB7mTRpkrvPyZMNw7c0LVv3179+vXT4c0HtWXLfvXs2dMbQwAAAABQ3j9PvcX
y8jI8FhPSUKp8/0S5Jo157NmZTJXFAAAAAACUQ6XCVZcuXwS2Yq122w2+fn5qXXr1kpISDFvfn2vuEAAAAAQa4qN
S3w7rvv1vff6+6deuqb9++uu00015vXj39+9//Vo8ePZSbm6vY2FtiWrXKdL0AAAAACE2q1Jwr48eP6/HHH9e0ad
M82p977jkdPHhQ69ev1/Tp0/Xss89q80DBRgoFAAAAGTzPa5cLV++XA888ECx9vvvv1/Lly+XJD3wwAPas2fPLVU
HAAAAANVEpcKVn5+fPv/882Ltn3/+ufz8/CRJhYwFvJgXAAAAQI1RqWmbf/rTnzR+/Hjt2LFDpXr0KM1m0xdffKG3
3npLU6d0LSR9/PHH6tKli9FiAQAaa0BaValw9dRTT+mWw27R/Pnz9e6770qS2rZtq4ULF+r3v/+9JGn8+PgAMGGCu
UoBAAAA4BpW6fDcjRgXQINGjCj1c39//8ruGgAAAACqnSt6ifC5c+d07NgXFRYWerQ3b978iooCAAAAg0qmUuFq37
59euihh4o91MKyLNLSNhUUFBgPDgAAAAACqIQFq4SEBNWuXVv/+Mc/FBwCLJvNZrouAAAAAKhWKhWusR0ztWPHDrV
r1850PQAAAABQLVXqPVfh4eE6fvy46VoAAAAAOnqQVLia0X0mnjciWVkJ0jEiRnyOp0eCwAAAADUNJWaFhgbGytJ
iomJ8WjngRYAAAAAaqpKhatNmzaZrgMAAAAAqrvKhavbb7/ddB0AAAAAUK2V01x9/fXX6tixo2rVqqwvv/66zL4RE
RFXxBgAAAAAVCFldled03dWXL6eGjdurM6d08tms8myrGL9u0cAAAAQE1U7nClf/9+NWRUyP1nAAAAAMD/U+5wFR
oa6v7zwYMHFR0drdq1PTc/f/68Pv/8c4+++AAAAAFATV0o9V3379tWPP/5YrD0/P199+/a94qIAAAAAoLqpVLgqep/
VpU6c0KG6detecVEAAAAAUN1U6FHsQ4YMKXThoruJCQmy2+3uzwoKCVt1118r0jrabIUAAAAUA1UKFw5HA5JF65c
BQQEYn/f3/2Zr6+vIiMj9Yc//MFshQAAAAABQDVQoXC1evFiS1KJFC02ZMoUpGAAAAADw/6tQuCoyffp003UAAAAAQ
LVWqXALsX//+9+1fPly5eTk6Ny5cx6fffnllldcGAAAAABUJ5V6WuDCuXM1evRoNW7cWdt37lTPnj3VsGDFdf/99+
rfv7/pGgEAAADgmlePCX6668r0TLZ8+fPl6+vR5544glT2LBBjzzyiPLz803XCAAAAADXvEqFq5ychPCj1/39/XX
q1ClJUnx8vJTU81VBwAAAAADVRKXCVVBQkE6c0CFJCg0N1datWyVJ+/fvL2VZ5qoDAAAAGqiiUuHqzjvv1IcffiHJ
GjNmjCZPNqy4uDGnH5zc//Vf/2W0QAAAAACoDir1tMDk5GQVFhZKksaPH68GDRos88+0z33E0AqAAAFaJVerKV
a1atVS79v/LZcOGDDPUqV01b98+hYwFGS0AAAAAKqLCowRkydPasSIEWrUqJGaNm2quXPNqrCUe8//bRatWqlrV
u36u23366qWgEAAADgmLWhaYFTp07Vli1bNGrUKK1bt06TJ0/WunXrdPbsWa1Zs0a33357VdUJAAAAANe0CoWrjz7
6SIsXL1ZsbKwefvhtW7dWmFhYZo9e3YVLQcAAAAA1U0FpgUe0XJE4eHhkqSWLVvKz89PY8e0rZLCAAAAAKA6qVC4
KiwsLI+Pj3v9hhtuUN26dY0XBQAAAAADVTYwMBVqWpYSEBNntdknS2bNnNX78+GIBa8WKFeYqBAAAIBqoELhatSoU
R7rI0e0NFoMAAAAAFRXFQpXixcvrqo6AAAAAKBa9RLhAEAAAAAnghXAAAAAGAA4QoAAAAADCBcAQAIIABhCsAAA

AAMIBwBQAAAAAGEK4AAAAAwADCFQAAAAAYcM2Eq6SkJNlsNj366KNl9tu8eb06desmPz8/tWzZUm+88UaxPunp6Qo
PD5fdbld4eLhWrLxZRVUDDAAAAAwAXXRLjKyspScnKyIiIiyuy3f/9+DRgwQLfddpt27typqV0n6pFHHlF6erq7T2Zm
poYPH674+Hh99dVXio+P17Bhw7Rt27aqHgYAAACAGszr4er06dMaMWKEFi5cqPr165fZ94033Ldz5s01e/ZstW/fX
mPHjtVDDZ2kV155xdln9uzZiouLU2Jiotqla6fExETfXMRo9uzZVTwSAAAAADVZbW8XMHHiRA0c0FCxsbf67rnnny
ybmZmpfv36ebTdddddWrRokX799Vf5+PgoMzNTkydPLtanrHDlcrnkcrcn606ns+IDgVuts/neLgEAAAA140e0quX
VcJWWlqYvv/xSWVLZ5eqf15enJk2aeLQladJE58+f1/HjxxUcHFxqn7y8vFL3m5SUpbKzZlR8APDgcDjk42uXvt/s
7VIAAABQCh9fuxw0h7fLuC55LVwdOnRIkyZN0vr16+Xn51fu7Ww2m8e6ZVnF2kvqc2nbxRITE/XY4+51510p0JCQ
spdEy500qSJlR67Rpn5/EYEWpXh4MGDev755/XnP/9ZoaGh3i4HAIxw0BzFLkbADK+Fqx07dujYsWPq1q2bu62goE
BbtmzR/Pnz5XK5dMMNN3hsExQUV0wK1LFjx1S7dm01bNiwzD5LfYHsdrrvsdVuDgm6ELD4xwrgheMaGqqwsDBvLwE
AuMZ57YEWMTEx2rVrL7Kzs91L9+7dNWLECGVnZxcLVpIUFRWLDrs2eLStX79e3bt3l4+PT5L9oq0jq24wAAAAAGo8
r125CggIUme0HT3a6tatq4YNG7rbExMTdfjwYS1ZskSSNH78eM2fP1+PPfaY/vCHPygZM10LFi1Samqqex+TjK1Sn
z59NHPmTA0ePFirVq3Sxo0b9dlnn129wQEAAACocbz+KPay50bmKicnx71+yy23aM2aNcrIyFDnZp317LPPau7cub
r33nvdfakJo5WWlqbFixcrIiJCKSkpWrZsmXr16uWNIQAAAACoIWxW0RMh40Z00uVw0JSfn6/AwEBvLwMA8JK9e/d
q3LhxSk505p4rAKihKpINrukrVwAAAAABQXRCuAAAAAMAAwUAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIwB
AAAAAgAGEKwAAAAAwgHFAAAAAAYQrgAAAAADAAMIVAAAAABhAuAIAAAAAAwHAAAAAGAA4QoAAAAADCBcAQAAAIABh
CsAAAAAMIBwBQAAAAAGEK4AAAAAwADCFQAAAAAYQLgCAAAAAAMIVwAAAAABgAOEKAaaaaAwgXAEAAACAAYQrAAAAAD
CacAUAAAAABhCuAAAAAMAAwUAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIwBAAAAAgAGEKwAAAAAwgHFAAAA
AAAYQrgAAAAADAAMIVAAAAABhAuAIAAAAAAwHAAAAAGAA4QoAAAAADCBcAQAAAIABhCsAAAAAMIBwBQAAAAAGEK4A
AAAAAwADCFQAAAAAYQLgCAAAAAAMIVwAAAAABgAOEKAaaaaAwgXAEAAACAAYQrAAAAADCAcAUAAAAABhCuAAAAAMAAw
hUAAAAAGODVclVgwQJFREQoMdBQgYGBioK0tqla0vtN5CQIJvNVmzp0KGDu09KSkqJfc6ePXs1hgQAAACghqrtzY
M3a9ZML7740lq3bi1JeueddZr48GDt3LnTizAVmTNnj1588UX3+vnz53Xrrbfqvvuu8+gXGBioPXv2eLT5+f1VwQg
AAAAA4AKvhqt77rnHY/3555/XggULtHXr1hLDlCPhkMPhcK9/8MEH+umnzR69GiPfjabTUFBQVVTNAAAAACU4Jq5
56qgoEBpaWk6c+aMoqKiyRXNokWLFbsbq9DQUI/206dPKzQ0VM2aNd0gQY00c+f0MvfjcrnkDdo9FgAAAACoCK+Hq
127dqlevXqy2+0aP368Vq5cqfDw8Mtu15ubq7Vr12rs2LEe7e3atVNKSopWr16t1NRU+fn5qXfv3tq3b1+p+0pKSn
JfFXM4HAoJCbncQEAAACoWwYwZVneL0DcuXPKycnRyZMnLZ6errfeekubN2++bMBKSkRsq6++qINHjsjX17fUf0W
Fheratav690mjuXPnltjH5XLJ5XK51510p0JCQpSfn6/AwMDKDQwAU03t3btX48aNU3JySSLCwrxdDgDAC5x0pxw0
R7mygVfvuZIkX19f9wMtunfvrrqysLM2ZM0dvvvlmqdtYlqW3335b8fHxZQYrSapVq5Z690hR5pUru90uu91euQEAA
AAAgK6BaYGXsizL4ypSSTZv3qzvvt0Y8aMKdf+sR0zFRwcbKpEAAAAACjGq1eupk6dqV79+ySkJESnTp1SWlqaMj
IytG7d0kLSymKiDh8+rCVLlnhst2jRivXq1Usd03Ysts8ZM2YoMjJSbdq0kdPp1Ny5c5Wdna3XXnvtqowJAAAAQM3
k1XB190hRxcfHKzc3Vw6HQxEREVq3bp3i4uIkXXhoRU50jSc2+fn5Sk9P15w5c0rc58mTJzVu3Djl5eXJ4XCoS5cu
2rJli3r27Fnl4wEAAABQc3n9gRbXoorctAYAuH7xQAsAQEYwTV3zxUAAAAVEeEKwAAAAAwgHFAAAAAAYQrgAAA
ADAAMIVAAAAABhAuAIAAAAAAwHAAAAAGAA4QoAAAAADCBcAQAAAIABhCsAAAAAMIBwBQAAAAAGEK4AAAAAwADCFQ
AAAAAYQLgCAAAAAAMIVwAAAAABgAOEKAaaaaAwgXAEAAACAAYQrAAAAADCAcAUAAAAABhCuAAAAAMAAwHAAAAAGEC
4AgAAAAADCFcAAAAAYADhCgAAAAAMIwBAAAAAgAGEKwAAAAAwgHFAAAAAAYQrgAAAAADAAMIVAAAAABhAuAIAAAAA
AwHAAAAAGAA4QoAAAAADCBcAQAAAIABhCsAAAAAMIBwBQAAAAAGEK4AAAAAwADCFQAAAAAYQLgCAAAAAAMIVwAAA
ABgAOEKAaaaaAwgXAEAAACAAYQrAAAAADCAcAUAAAAABhCuAAAAAMAAwHAAAAAGEC4AgAAAAADCFcAAAAAYADhCg
AAAAAMIwBAAAAAgAGEKwAAAAAwgKvhasGCBYqIiFBgYKACawMVFRWltWvXlto/IyNDNput2PLtt9969E+PT1d4eLj
sdrvCw801cuXKqh4KAAAAGBrOq+GqWbNmevHFF7V9+3Zt375dd955pwYPHqxxvvvmz0327Nmj3Nxc99KmTRv3Z5mZ
mRo+fLji4+P11VdfKT4+XsOGDd02bduqejgAAAAArDa3jz4Pffc47H+/PPPa8GCBdq6das6d0hQ6naNgzfWjTfew
0Jns2fPVlxcnBITeyVJiYmJ2rx5s2bPnq3U1FRjtQMAAADaxa6Ze64KCGqULpamM2f0KCoqqsy+Xbp0UXBwsGJiYr
Rp0yaPzzIzM9WvXz+Ptrvuukuff/658ZoBAAAAoIhXr1xJ0q5duxQVFaWzZ8+qXr16WrlypcLDw0vsGxwcr0TkZHX
r1k0ul0vvvvuuYmJiLJGRoT59+kiS8vLy1KRJE4/tmjRpory8vFJrcLlccrlc7nWn02lgZAAAAABqEq+Hq7Zt2yo7
01snT55Uenq6Ro0apc2bN5cYsNq2bau2bdu6160ionTo0CG98sor7nAlSTabzWM7y7KKtV0sKSLJM2bMMDaAAAAA
DWV16cF+v6qnXr1urevbuSkpJ06623as6c0eXepJiYUvv27X0vBwUFFbtKdezYsWJXsy6WmJio/Px893L0oKGKDw
QAAABAjeb1cHUPy7I8puhdzs6d0xUcH0xej4qK0oYNGzz6rF+/XtHR0aXuw263ux8HX7QAAAAQEV4dVrg1KLt1b9
/f4WEH0jUqVnKS0tTRkaG1qlbJ+nCFaXdhw9ryZilki48CbBFixbq0KGDzp07p6VLlyo9PV3p6JenfU6aNEl9+vTR
zJkzNjwYK1atUobN27Uz5995pUxAgAAAKgZvBilqh49qqv4e0Rm5srhcCgiIkLr1q1TXfycJck3N1c50Tnu/ufOn
d0UKVN0+PBH+fV7q00HDVvroo480YMAAd5/o6Glpqqaee0Rm09SsqVstW7ZMvXr1uurjAwAAAFB2CzLsrxdxL
XG6XTK4XAoPz+fKYIAUIPt3btX48aNU3JySSLCwrxdDgDACyqSDa65e64AAAAAoDoiXAEAAACAAYQrAAAAADCAcAU
AAAAABhCuAAAAAMAAwHAAAAAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIwBAAAAAgAGEKwAAAAAwgHFAAAAAAYQ
rgAAAAADAAMIVAAAAABhAuAIAAAAAAwHAAAAAGAA4QoAAAAADCBcAQAAAIABhCsAAAAAMIBwBQAAAAAGEK4AAAAAw
ADCFQAAAAAYQLgCAAAAAAMIVwAAAAABgAOEKAaaaaAwgXAEAAACAAYQrAAAAADCAcAUAAAAABhCuAAAAAMAAwHAAAA
AAGEC4AgAAAAADCFcAAAAAYADhCgAAAAAMIwBAAAAAgAGEKwAAAAAwgHFAAAAAAYQrgAAAAADAAMIVAAAAABhAuAIA
AAAAAwHAAAAAGAA4QoAAAAADCBcAQAAAIABtb1dAABU1NmzZ5Wtk+PtMLADHDx4000/QFVr3ry5/Pz8vF0GgEoi
XAGodnJycjRu3DhvL4Ea5Pnnn/d2Caghkp0TFRYw5u0yAFQs4QpAtD08eXmLJyd7uwwAMK558+beLgHAFSBCAah2/
Pz8+M0uAAC45vBACwAAAAAwgHFAAAAAAYQrgAAAAADAAMIVAAAAABhAuAIAAAAAA7warhYsWKCIiAgFBgYqMdBQUV
FRWrt2ban9V6xYobi40DVq1Mjd/+OPP/bok5KSIpVNVmw5e/ZsVQ8HAAAAQA3m1XDvRFkzvfjii9q+fbu2b9+u0++
8U4MHD9Y333xTYv8tW7YoLi50a9as0Y4d09S3b1/dc8892rlzp0e/wMBA5ebmeiy87RwAAABAVbJZlmV5u4iLNWjQ
QC+//LLGjBLTrv4dOnTQ80HD9fTTT0u6c0Xq0Ucf1cmTJytdg9PpLMPHUh5+vgIDayu9HwAAAAADV0WYwTVzz1VBQ
YHS0tJ05swZRUVFlwubwsJCnTp1Sg0aNPBoP336tEJDQ9WswTMNGjSo2JWtS7lcljmdTo8FAAAAAACrC6+Fq165dql
evnux2u8aPH6+VK1cqPDy8XNu++uqrOnPmjIYNG+Zua9eunVJSUR69WqlpqBkz89PvXv31r59+0rdT1JSkhW0h3s
JCQm54nEBAAAAqFm8Pi3w3LlzySnJ0cmTJ5Wenq633npLmzdvmzAsk1N1dixY7Vq1SrFxs2M2dqwvsFBdu3ZVnz59
NHfu3BL7UfWuuWvu97rT6VRISAJtAgEAAIAariLTAmTfpZpK5evrq9atW0uSunfvrqysLM2ZM0dvvvlmqdssW7ZMY
8aM0fvvv19msJkkWrVqqUePHmVeubL7bLb7ZubAAAAAADoGpgWeCnLsjyI10qNTVVCQkJeU+99zRw4MBy7S8701
vBwcEmywQAAAAAD169cjV16LT1799fISEh0nXqlNLS0pSRkaF169ZJkhITE3X48GEtWbJE0oVg9eCDD2rOnDmKjIx
UXl6eJMnf3180h00SNGPGDEVGRqpNmzZy0p2a03eusr0z9dpr3lnkAAAAABqBK+Gq6NHjyo+Pl65ubly0ByKiIjQ
unXrFBcXJ0nKzc1VTk60u/+bb76p8+fPa+LEiZo4caK7fdSoUUpJSZEknTx5UuPGjVNeXp4cDoe6d0miLVu2qGfPn


```
ld1bAAAAAbqFq8/00JaxHuuAAAAAEjV9D1XAAAAAFCdef1pgdeioot5vEwYAAAAqNmKmkF5JvwRrkpw6tQpSeJlwg
AAAAAkXcgIRQ/RKw33XJWgsLBQR44cUUBAgGw2m7fLAQB4SdFL5Q8d0sQ9uABQQ1mWpV0nTqlp06aqVavsu6oIVwA
AlIIHHAEAKoIHWgAAAAACAAYQrAAAAADCACAUAQcnsdrumT58uu93u7VIAANUA91wBAAAAGAFcuQIAAAAAAwhXAAAA
AGAA4QoAAAAADCBCAQAAAIABhCsAAAAAMIBwBQAAAAAGEK4AAAAAwADCFQAAAAAY8P8Bb7N8tN6nnTwAAAAASUVOR
K5CYII=",
  "text/plain": [
    "<Figure size 1000x600 with 1 Axes>"
  ],
  "metadata": {},
  "output_type": "display_data"
},
{
  "source": [
    "plt.figure(figsize=(10,6))\n",
    "sns.boxplot(df_outliers['Rating'])\n",
    "plt.title('Rating Distribution without Outliers')\n",
    "plt.show()"
  ],
  "cell_type": "code",
  "execution_count": 72,
  "id": "162c7e97-caac-49b8-8898-1d901ed2a498",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "image/png":
"iVBORw0KGgoAAAANSUhEUgAAA+gAAAK7CAYAAABhzqUJAAAAOXRFWHRTb2Z0d2FyZQBNYXRwbG90bGliIHZlcnNp
b24zLjguMCwgHR0cHM6Ly9tYXRwbG90bGliLm9yZy81sbWwAAAAACXBIWMAAA9hAAAPYQGoP6dpAAEAAELEQVR4n
Ozde1z05/H8H8Nen093h7uxQSEkqLYUNcliKWjzm0EEj5z0jaGH0hM15c9jcFUPks0bwnVkmZs6mZkLM2pgaQ0VI8v
n94dHn5+0+q7vUthK9H4/r8dh9Xdfn+ryvT3k89u66PtctiKIogoiIiIiIiIheKZ1XHQARERERERERMUEnIiIiIiI
iqhaYoBMRERERERFVA0zQiYiIiIiIiKoBJuHERERERERE1QATdCIiIiIiIqJqgAk6ERERERERUTXABJ2IiIiIiIio
GmCCTkRERERERFQNMEEEnIiIqP/j4eAiCAENDQ/z+++9q7d7e3vDw8HgFkQEpKSkQBAHbt29/Jfcvr8zMHTp0gVWV
LYQBAEfffPBbmdcUFhbCxsbmXzPP4p9JSkpKpY3p7e0NQRA0FgcHh0q7z4sEQcCYMWNeaoy//voLH374IZo0aQKLUG
LDQ0M0atQI48ePx+XLl8s9Xnp60mb0nInMzMyXiouIqDrQe9UBEBER/VsVFBRg2rRp+PLLL191KP9aEyZMwIkTJxA
bGwsbGxvY2tqWec2ePXvw119/AQBUKHv69+5d1WG+l0bNm+PYsWNwc30r1HEdHR2xadMmtXqFQLGp96lMJ0+eRNeu
XSGKIsaMGYPWrvVdWMAAly5dwsaNG9GyZUvcvXu3XG0mp6dj1qxZ8Pb2rtI/ThAR/ROYoBMREVVQQAANm/ejMjIS
Hh6er7qcP5RDx8+hKGhIQRBeKlxfvnlF7Rs2RI9e/bU+hqVSGUDAw00b98e+/fvx/Xr11GvXr2XiQmQmZmZ4e2336
70cY2MjKpk3KqS5eHHj16wNDQEEePhP9XzLy9vTF8+PB/xY6IL/Hw4UMYGRm96jCIqBrjFnciIqIKmjx5MqytrRE
VFVvqV8zMtAiCgPj4eLU2QRAwc+ZM6fPmTMhCAJ+/vLn90nTB+bm5rCyssLEiRPx5MkTXLp0CQEBATA1NYWDgMW
LVqk8Z6PHj3CxiKTYWnjAyMjI7Rv3x5nz55V63f69GL0794dVLZWMDQ0RLNmzZCYmCjrU7ylf//+/Rg0aBBq1qwJY
2NjFBQUldjnP/74A2FhYahVqxYUCgUaN26MxYsX4+nTpWd+f9v3LstX8M0330jbs8vapnzjxg3s27cP3bp1w6RJk/
D06VONzzU8PBxKpRLnz59Hx44dYwJigpola2LMMDF480CBrg/xtu21a9fC2dkZCoUCbm5u2LJli6zfzgcPEBkZiQY
NGsDQ0BBWVLZ46623kJCQUGrMmra4F8d35coVd07cGUqlEnZ2doiIiCjluZbXrVu3MGrUKLi5uUGpVKJWrVro0KED
fvjhB7W+BOQUFMD17Nho3bgxDQ0NYW1vDx8CHR48eVev75ZdfonHjxjA2Noanpyf27NLTZixffPEFsr0zsWjRohL/o
Pl8bojTp08j0DgYdg40MDIygo0DA0JCQmSvlcTHx6MNPnz4AAB8fH+n36PnfieTkZHTs2BFmZmYwNjZG27ZtceDAAB
V7f/3113jjjTegUCyg60iI5cuXS/8en/fo0SNER0ejQYMGMDAwQN26dTF69Gjk50TI+jk40KBr167YuXmnmjVrBkN
DQ8yaNQsd03aEq6srRFGU9RdFEU50TujSpUuZz5KI/ruYoBMREVWQqakppk2bhm+/Rbfff/99pY7dt29feHp6Yse0
HRg6dCiWLL2KCRMMoGfPnujSpQu++uord0jQAVFRUdi5c6fa9V0mTMHVqllexbt06rFu3Djdu3IC3tzeuXr0q9Tl48
CDatm2LnJwcrFmzBl9//TWaNm2KoKAgjUnvoEGDoK+vjj+/BLbt2+Hvr6+xthv3bqFNm3aYP+/ZgzZw527doFX1
9fREZGSu8vF2/7trGxQdu2bXHS2DEc03aszC3u8fHxKCoqwqBBg+Dr6wt7e3vExsaqJTvAs3fv03fujI4d0yIpKUL
Kwo0CgtT67tq1CytWrMDs2b0xfft22NvbIyQkRLai03HiRKxevRrjxo3Dvn3780WXX6JPnz64fft2qTGXpLCwEN27
d0fHjh3x9ddfY9CgQVI6dCkWLlyo9RhPnjxRK8V/BAGA03fuAABmzJiBvXv3Ii4uDo60jvD29pb9weDJkyfo1KkT5
syZg65du+Krr75CfHw82rRpgz/++EN2z7179+LTTz/F7NmzsWPHDLhZwafXr16y3y1N9u/fD11dXXTr1k2ruWVmZs
LFxQXLli3Dt99+i4ULFyIrkWstWrTA33//DQDo0qUL5s+fDwD47LPPpN+j4iR348aNePfdd2FmZob169cjMTERVLZ
W8Pf3lyXp+/btw3vvvQdra2ts3boVixYtQkKJCATavXy+LSRRF90zZE5988gnf/997N27FxMnTsT69evRoUMHtT+u
/PTTT5g0aZL00xMYGIjx48fj0qVLan8k+0abb/Drr79i90jRwj0fIvqPEomIiKhc4uLiRADiQV0nxIKCAthR0VF86
623xKdPn4qiKIrt27cX3d3dpf6//fabCECMi4tTGwuA0GPGD0nzjBkzRADi4sWLZf2aNm0qAhB37twp1RUWFool9
YU33vvPanu4MGDIgCxefPmUjyiKIqZmZiv6+OGTIEKn01dVVBnNasmVhYWCi7V9euXUVbWluxqKhInt+/ftr9Xw
+/PBDEYB44sQJwf3IKSNFQRDE55cuSXX29vZily5dtBr36d0nop0Tk1i3bl3xyZMnoij+/M6c0CAr0+AAQNEA0Ly
5ctL9fPmzRMBiEe0HJHqAiHGRKZidna2VPfkyRPR1dtVVdHJykuo8PDzEnj17ahXr84p/JgcPHLSLLZExUda3c+f0y
ouLS5l3jtm/fXgSgsQwPeLjE6548eSiWFhakHT2FHV16iXVb9iwwQ0QgfvHFF6Xf4BYu3ZtMS8vT6rLzs4WdXR0xJ
iYmFkVdXV1FWlswMqcW2mx379/Xz0qMZHXlDtd26b2fEVFRFPp80UkYuxw7dusvqioiLR09NTbNmyVTXokUL0c7
0TiwoKJDq7t27JlpbW4vP+/yvn37RADiokWLZGnu3bpVBCB+/vnnUp29vb2oq6sr+30vvv+j0PYo0cPWX2nTp3E
hq0byv7dEtHrhvYoREREL8HAWAbZ587F6d0n1baGv4yuXbvpKjdu3BiCIKBTp05SnZ6eHpycndSeJB8aGirbmmtvb
```

482bdrG4MGDAIARv67g4sWL6NevHwD5Smznzp2RlZWFS5cuycYMDAZUKvbvv/8ebm5uaNmpaw+PDwcoihWeLfbOu
0Hc0XKFQwYMAC6uroAgIEDB0IQBMTGxmQ8pnH+xUJDQwFAeg7F0nbsiNq1a0ufdXV1ERQUhCtXruD69esAgJYtW+K
bb77Bhx9+iJSUFDx8+LBC8ygmCILAavIbb7yh8eepSc0GDXHq1Cm18tFHH8n6rVmzBs2bN4ehoSH09PSgr6+PAwC0
4MKFC1Kfb775BoaGhhg0aFCZ9/Xx8YGpqa0uXbt2qhVq5bWcWvr/v37iIqKgp0TE/T09KcnpwelUon8/HxZ7CU5e
vQo7ty5gWEDBqjTMAgICMCPu6eQn5+P/Px8nD59Gj179oSBgYF0vVKpVPv5FP/uhoeHy+r790kDEXMTtVXxN954A8
70zrI6HR0djBkzBnv27JF2J/z666/Yt28fRo0a9dLn0hDRvxsTdCIiopcUHBByM5s2bY+rUqSgSLKyUMA2srGSfDQw
MYGxsDENDQ7X6R48eqV1vY20jsa5403bxKeiRkZHQ19eXlVGjRgGAtI24mDYnrAPA7du3NfatU6e01F4RKpUKANCr
Vy/k50QgJych5ubmaNeuHXbs2KH2DrCenh6sra1ldcXP5cUYSnepz/ddSWIFoqKikJSUBB8fH1hZwaFnz54V+mowA
Bp/ngqFQuPPUXNDQ0089dZbasXe3l7qs2TJEowc0RKtWrXCjh07cPz4cZw6dQoBAQGYpZDcunULderUgY502f9r+0
IzLY67rD9Y1K9fH7du3UJ+fr5W8wsNDcWnn36KIU0G4Ntvv8XJkydx6tQp1KxZU6s/jhT/jvfU3Vvtd3zhwoUQRRF
37tzB3bt3IYqi7A80xV6su337NvT09FCzZk1ZvSAIsn9fxUr6NzNo0CAYGRlhZzo1AJ5tzzcyMtLqDyRE9N/GU9yJ
iIhekiAIWLhwIfz8/PD555+rtRcnYS++n1rRRFUb2dnZGuuKk6saNWoAAKKjo/Hee+9pHMPFUX2WduVPWtra2RlZ
anV37hxQ3bv8sjNzcWOHTsAAC1atNDYZ/PmzdIfF4BnuwJu374tSyiLn8uLSWZJz+v5viYmJpg1axZmzZqFv/76S1
pN79atGy5evFju0f0Tnm7cCG9vb6xevVpWf+/ePdnmJvR4siRI3j69KLWSXpF+Pv7Y//+/di9ezeCg4NL7Zubm4s
9e/ZgxowZ+PDD6X6goIC6b36shT/nq1cubLE0+5r166NwsJCCIIgJfTpe/H3wtraGk+ePMGTW7dkSbooisj0zlb7
3Szp34y5uTkGDBiAdevWITiYEnFxcQgNDYWFhYVWcy0i/y6uoBMREVUCX19f+Pn5Yfbs2bh//76srXbt2jA0NMTPP
/8sq//666+rLJ6EHATZWm//47jh49Cm9vbWDPku9GjRohLS1N4yrsW2+9JdvGXB4d03ZEeno6fvrpJ1n9hg0bIA
gCfHx8yj3m5s2b8fDhQ8yZMwCHDX5UKzVq1NC4zf3F7wnfvHkzAEjPodiBAwdkCVpRURG2bt2Khg0bajxxvHbt2gg
PD0dISAguxbqkdjJ8dSEIgr3ov/88884duyYrK5Tp05490iRxsMBK8vgwYNhY20dyZMn488//9TYp/jAQ0EQIIqi
Wuzr1q1DUVGRkR64z4ur6m3btowFhQXS09NL/B03MDCaiYkJ3nrrLSQLJeHx48fS9ffv31c7nb5jx44Anv3h43k7d
uxAfn6+1K6NcePG4e+//0bv3r2Rk5MjHaBIRK83rqATERFVkoULF+LNN9/EzZs34e7uLtULgoCwsDDExsaiYc0G8P
T0xmM TJ6VksSrvHkTvXr1wtChQ5Gbm4sZM2bA0NAQ0dHRUp+1a9eiU6d08Pf3R3h400rWrYs7d+7gwoUL+0mn7B
t27YK3XvChAnYsGEDunTpgtmzZ8Pe3h579+7FqLwRMHLkSLV3crWhUqlgaWmJyMhItW3hANC/f38swbIEawlp0nfS
GxgYYPHixbh//z5atGiBo0ePYu7cuejUqRPatWsnu75GjRro0KEDPvroI5iYmGDVqlW4ePGi7KvWwVqha5du+KNN
96ApaULLy4gC+//BKtW7eGsbFxuef0sh4+fIjxx49rbCteMe7atSvmzJmDGTNmoH379rh06RJmz56NBg0a4MmTJ1
L/kJAQxMXFYcSIEbh06RJ8fHw90LTnDhxAo0bNy5zxVsb5ubm+Prrr9G1a1c0a9YMY8aMQevWrWfGYIDLly9j48a
NSEtLw3vvvQczMzN4eXnh448/Ro0aNeDg4IBDhw5BpVKprTJ7eHgAAD7//H0YmprC0NAQDRo0gLW1NVauXIkbAwbg
zp076N27N2rVqoVbt24hLS0Nt27dknYwzJ49G126dIG/vz/Gjx+PoqiIfPzxx1AqlbIVez8/P/j7+yMqKgp5eXlo2
7Ytfv75Z8yYMQPNmjXD+++/r/XzczZ2RkBAAL755hu0a9d0+r0lotfcqzyhjoii6N/o+VPcXxQaGioCk3iLoqimJ
ubKw4ZMkSsXbu2aGjiInbr1k3MzMs8RT3W7duya4fMGCAaGJiona/F0+MLz4x/MsvvxTHjRsn1qxZU1QoF0I777w
jnJ59Wu36tLQ0sw/fvMkT4WrVEfX190cbGRuzQ0Y04Zs0aieZbkt9//10MDQ0Vra2tRX19dHFfUX8+00PpZPHi2lz
intaWp0IPQzgvg9K7HpkXkRQDhK7FhRFP//ef3888+it7e3aGrkKJFpZWYkjR44U79+/L7swGdh69Gh1pVYsOGD
UV9f3R1dVV3LrpK6zfhx9+KGL711luipaWlqFAoREdHR3HCHani33//XWr8JZ3irunnWfzzL0tpp7gDkLaplYygoEC
MjI8W6deuKhoaGYvPmzcWkpCRxwIABor29vWzMhw8fit0nTxcBNwokGhgYiNbW1mKHDh3Eo0ePqj2rF9nb24sDBgw
oM25RfHbqe1RUl0ju7i4aGxuLCoVCdHjYecPHY6e03d06nf9+nUxMDBQTLs0FE1NTcWagAdx1l9+0XivZcuWiQ0a
NBB1dXXVvjHh0KFDYpcuXUQRKytrX19frFu3rtiLsdx27ZtsjG++uorsUmTJqKBgYFYv359ccGCBeK4ceNES0tLt
ecUFRUL2tvbi/r6+qKtra04cuRI8e7du2rPpKzf7fj4eBGauGXLfQ2eHRH99wmiq0GLQ4mIiij+xcLDw7F9+3a1lw
00EQQB00ePqxqeffvoPREB/FowFhwjatCnqlq2L/fv3V8k9AgMDcfz4cWRmZkJfX79K7kFE/y7c4k5ERERER73Bgwf
Dz88Ptra2yM70xpol3aDhwgUsX768Uu9TUFCAN376CSdPnsRXX32FJUuWMDknIgtDciIiIj67d27dw+RkZG4desW
9PX10bx5c/zvf/+Dr69vpd4nKysLbdq0gZmZGYYPH46xY8dW6vhE90/GLe5ERERERERE1QC/Zo2IiIiIiIoGmCCT
kRERERERFQNMEEiIiIiIiqgZ4SBxRFxN69Clu3LgBU1NTCILwqsMhIiIiIqJXRBRF3Lt3D3Xq1IG0Tsnr5EzQia
rIjRs3YGdn96rDICIiIiKiauLatWuoV69eie1M0ImqiKmpKYBn/wjNzMxecTRERERERPSq50Xlwc70TsoRSsIEnai
KFG9r77pol3QVRq84GiIiIiKi18eZj/u/6hA0KuvVvX4SR0RERERERFQNMEEiIiIiIiIqgaYoNMrFx4eDKEQ1MqV
K1cAAPPnz4euri4WLFigdm18fDwEQUDjxo3V2hITEyEIAhwCHGT9LSwsSvwMAIMHD0aTJk3w+PFjWf3//vc/60vr4
/Tp0xwFLBERERERUQmYoF01EBAQgKysLF1p0KABACAuLg6TJ09GbGysxmtNTEw8+ZNHDT2TFYfGxul+vXrlzuWZc
uW4d69e5gy4ZU150Tg2HDhmHq1KL46623yj0MERERERFRWZigU7WgUChgY2MjK7q6ujh06BAePnyI2bNnIz8/H4c
PH1a7V6k9PD6GhubIE/vr160hJSUFoaGi5YzE1NUV8fDwL16MEyd0AAA++0AD2NraYtq0ARyJBERERERUSmYF01
pLkPEBISAN19fySEhECUmnS3jwYGzduhUPHjwA8GzrekBAAGXrL2h+3p7e2PUqFEYMGAAtm3bhsTERGzYsAF6e
iV/8UFBQqHy8vJkhyiIiIiISFtM0KLa2LnnD5RKpVT690mDvLw87NixA2FhYQCAslAwbn++XWPi27RpUzRs2BDbt2
+HKIqIj4/HoEGDXiqmmJgYCIKA40BgZJ8/X+N77i/2Nzc3l4qdnd1L3Z+IiIiIiF4vTNCpWvDx8UFqaqpUVqxYgc2
bN8PR0RGenp4AniXhjo602LJli8YxBg0ahLi40Bw6dAj3799H586dXyomIyMjRERewNjYG0PHjy+zf3R0NHJzc6Vy
7dq1l7o/ERERERG9Xkrer0v0DzIxMYGtK50sLjY2FufPn5dtK3/69CLUKhWGDRLmNka/fv0wefJkzJw5E/379y910
7q29PT0oKurC0EQyuyrUCigUChe+p5ERERERPR6YoJ01dK5c+dw+vRppKSkwMrKSqrPycmBl5cXfvn1f3h4eMiusb
KyQvfu3ZGYmIgl9b80yETERERERG9FCboVC2pVCq0bNkSXL5eam2tW7eGSqXC0qVL1dri4+0xatUqWftba32voqI
ipKamyuoMDAazg5uZW7riJiIiIiIqgiu+gU7Xz+PFjbNy4EYGBgRrbAwMDsXHjRjx+/FitzcjIqFzJOQDcv38fzZo1
k5WXfX+diIiIiIiIovARRFMVXHQTrf1FeXh7Mzc3h0XYNdBVGrzocIiIiIqLXxpmP+7/qEGSKc4Pc3FyYmZmV2I8r6
ERERERERETVAN9BJ6pih+eGLPpXmiIiIiIiIoAr6ERERERERETVAhN0IiIiIiIiomqAW9yJqpjXtAQeEkdERK9EdT
skiYiISscVdCIiIiIiIqJqgAk6ERERERERUTXABJ2IiIiIiIioGmCCTtVadnY2xo8fDycnJxgaGqJ27dp0l64dlqx
ZgwcPHsj6zp8/H7q6uliwYIHaOPHx8RAEAY0bN1ZrS0xMhCAICHBU0v/YjE0NKz00RIREREREQE8JI6qsatXr6Jt
27awsLDA/Pnz0aRJEzX58gQZGRmIjY1FnTp10L17d6L/XFwcJk+ejNjYWHz44Ydq45mYm0DmzZs4duwYrduLdXHx
saifv36av3NmXw6dILWZ0gCJU4QyIiIiIioV/HBJ2qrVGjRkFPTw+nT5+GiYmJVN+ksRMEBgZCFEWp7tChQ3j48C
Fmz56NDRS24PDhw/Dy8pKNp6enh9DQUMTgxkoJ+vXr15GSKoIIEyYISFB1l8QBNjY2FTdImIiIiIiI4ft7hTtXT
79m3s378fo0ePliXnz3t+NVuLiUikJAT6+voIC0mBSQXSeM3gwY0xdetWaXt8fHw8AgICULT27ZeOuaCgAHL5ebJc
RERERESkLSboVC1duXIFoiJcxcVfVl+jRg0oLuo0LUpERUUBAPLY8rBjxw6EhYUBAMLCwrB9+3aNCXLtpk3RsGfDb
N++HaIoIj4+HoMGddIYQ25urnSv4vLu+++WGHNMtAzMzc2LYmdnV9HpExERERHRA4gJ0LvrL77zfflKsSmpsLd3R
0FBQUAGm2bN8PR0RGenp4AniXhjo602LJli8YxBw0ahLi40Bw6dAj3799H586dNfyZNTVFamqqrMTFxZUYa3R0NHJ
zc6Vy7dq1ikyZiIiIiIheU3wHnaolJycnCIKAixcvuodHR0BAEZGRlJdbGwszp8/Dz29//91fvr0KVQqFYyNG6Y2

dr9+/TB58mTMnDkT/fv3l133PB0dHTg50Wkds0KhgEKh0Lo/ERERERHR87iCTtWStbU1/Pz880mnnyI/P7/EfufOn
cPp06eRkpIiW+k+fPgWtp06hV9++UXtGisrK3Tv3h2HDh0qcXs7ERERERHRP40r6FrtrVq1Cm3btsVbb72FmTnn4o
033oC0jg50nTqFixcv4s0334RKpUllli3VTmwHgNatW00LumHp0qVqbFhX8Vi1ahWsra1LvL8oisj0zlar1rWFnR
0+LctIiIiIiKqXEzQqdpq2LAhzp49i/nz5yM60hrXr1+HQqGAM5sbIiMjMWzYMDg60kqHxb0oMDAQMTExWLhwoVqb
kZGRbJu8Jnl5ebC1tVWrz8rK4tevERERERFRpRPE579MmogqTV5eHszNzeE5dg10FaX/MYCIiKgqnPm4/6s0gYiI8
P+5QW5uLszMzErsxxV0oip2eG5Iqf8IiYiIiIiIAB4SR0RERERERFQtMEEnIiIiIiIiIqgaYoBMRERERERFVA3wHna
iKeU1L4CFxREQa8AAzIiIi0a6gExEREREREVDUTNCJiIiIiIiIqgEm6PTKCIJQagkPD5f67tmzB97e3jA1NYWxsTF
atGiB+Ph4je0uX78eLVu2hImJCUxNTEHl5YU9e/bI+qSkpEAQB0Tk5GgcIz8/H1FRUXB0dIShoSFq1qwJb29vtXGI
iIiIiIqgCxN0emWysrKksmzZMpiZmcnqli9fDgBYuXIlevTogTZt2uDEiRP4+eefERwcjBEjRiAyMLI2ZmRkJIYPH
46+ffsiLS0NJ0+exDvvvIMePXrg008/1Tq2ESNGICKpCZ9++ikuXryIffv2ITAwELdv367UZ0BERERERFSMh8TRK2
NjYyP9t7m50QRBNuBwLvr1xAREYEPpvgA8+fPl+ojIiJgYGCAcePGou+fPmjVqhW0Hz+0xYsXY8WKFRg7dqzUd96
8eXj06BEmTpyIHj16wM70rszYdu/ejeXL6Nz584AAACHB7z55psv02UiIiIiIqIScQWdqrXt27ejsLBQbaUcAIYP
Hw6lUomEhAAQAEJCAPRKJYYPH67WnyIiAowFhdixY4dW97WxSCH//vc/3Lt3T+tYCwoKkJexJytERERERETaYoJ01
VpGRgbMzc1ha2ur1mZgYABHR0dkZGRIFrs2bAgDAw01vnXq1IG5ubnUtyyff/45jh49Cmtra7Ro0QITJkzAjz/+W0
o1MTExMDC3L4o2K/VERERERETfMkDTv5ooihAEodL7enL54erVqzhw4AACAwNx/vx5vPP005gzZ06J10RHRyM3N1c
q165d0+peREREREREAB0quacnZ2Rm5uLGzduqLU9fVwYV69eRaNGjaS+v/76Kx4/fqzW98aNG8jLy5P6akNfXx/v
vPM0PvzWQ+zfvx+zZ8/GnDlZNI4PAAqFAMZmZrJCRERERESkLSboVK0FBgZCT08PixcvVmtbs2YN8vPzERISAgAID
g7G/fv3sXbtWrW+n3zyCfT19REYGFjhWNzc3PDkyRM8evSowmQERERERGVhKe4U7VWv359LFq0CJGRkTA0NMT777
8PfX19fP3115gyZQoiIiLQqlUrAEDr1q0xfvx4TJo0CY8fP0bPnj1RWFiiJRs3Yvny5Vi2bJnae+Hnzp2DqampR5
p06bw9vZGSEgI3nrrLVhbWym9PR1TpkYBj48PV8aJiIiIiKkMEGnam/ChAl02LahPvnkEyxfvhXFRUVwd3fH6tWr
MXDgQFnfZcuW4Y033sDqlavx0UcfQRAENG/eHELJSejWrZva2F5eXmploiJc398f69evx5QpU/DgwQPUqVMHxbt2x
fTp06tsnrERERERE9HoTRFEUX3UQRP9FeXl5MDC3h+fYndBVGL3qcIiIqP0ZH/d/1SEQERH9I4pzg9zc3FJ35PiddC
IiIiIiIqJqgFvciarY4bkhfG+diIiIiIjKxBV0IiIiIiIomqACToRERERERFRNCAEnYiIiIiIiIiKga4DvoRFXMal0
CT3GnUvEkayIiIiICuIJOREREREREVC0wQSciIiIiIiIqBpigU6UIDw+HIAhq5cqVKwgPD0fPnj3V+i5YsEA2RLJS
EgRB0Di+i4sLDAwM80eff6q1eXt7QxAEBNmyRva/bNky0Dg4y0oeP36MRYSWwdPTE8bGxqhRowbatm2LuLg4FBYWL
jqXgICACjwZIIiIiIiI7BBp0oTEBCARkwsWwnQoIHGvaoGhli4cChu3r1b5rhHjhZBo0eP0KdPH8Thx5c43rRp06
QkW5PHjx/D398fCxYswLBhw3D06FGcPHKSo0ePxsqVK3H+/PLS55KQkFBmrERERERERERBFBj0qjUKhgI2Njazo6up
q70vr6wsbGxvExMSU0a5KpUJoaCjef/99xMbGQhRfT4hISHIzc3FF198UeI4y5Ytw+HDh3HgwAGMHj0aTZs2ha0j
I0JDQ3HixAk0atSolLLYwlpq8RSIiIiIiIqghgk6vRK6urqYP38+Vq5cievXr5fY7969e9i2bRvCwsLg5+eH/Px8p
KSkqPUzMzPDLCLTMHv2b0Tn52sca90mTfD19UwzZs3U2vT19WFYlLh+QBAQUEB8vLyZiWIIiIiIiEhbTNCp0uzZsw
dKpVIqffr0KbV/r1690LRpU8yMaPEPLu2bEGjRo3g7u40XV1dBAChQ6VSAew7atQoGBoaYsmSJRrbLl++DfDx1wr
NRalY5s6c0aVeX4S4Nzc6N9Y2dlpdS8iIiIiIiIiK34N0LcjHxwvV6+WPmuzIrlw4U06NABERERERgttVKHXcwsKk
z2FhYfDy8kJOtGxMLCckfRUKBwbPno0xY8Zg5MiRam0JoljiIXRLzQUARkysSr0m0j0aEyd0Ld7n5eUxSSciIiIiI
qlxBZ0qjYmJCZycnKRia2tb5jVeXl7w9/fHLCLT1NrS09Nx4sQJTJ48GXp6etDT08Pbb7+Nhw8flnhgWlhyGBwCHD
B37ly1NmdnZ1y4cKfCc3FyciozQVcoFDAz5MVIiIiIiIibTFBplduwYIF2L17N44ePSqrV6LU8PLYQlpaGLJTU6U
yefLkEre56+joICYMbqtXr0ZmZqasLTQ0FMnJyTh79qzadU+ePCnx3XUiIiIiIqJ/AhN0euWaNGmCfv36YeXKLVJd
YWEhvvzyS4SEhMDDw0NWhgwZgjNnziAtLU3jeF26dEgRvQ2wdu1aWf0HH3yAtm3bomPHjvjs8+QlpaGqlevIjExE
alatlLly5elvgUFBcj0zpaVv//+u2oeABEREREREZigUzUxZ84c2den7dq1C7dv30avXr3U+jZq1AhNmjQpcRUdeP
Zu+6NHj2R1CoUC333HSZPnoy1a9fi7bffRoswLBbixQqMGzc0Hh4eUt99+/bB1tZWvtq1a1cJMyUiIiIiIiITJMEDV
9qTQRvbS8vDyYm5vDc+wa6CqMXnU4VI2d+bj/qw6BiIiIiIqPqCw6Qm5tb6LLVXEEnIiIiIiIiIqgb4NwtEvezw3BCe
6E5ERERERGXicJoRERERERFRNCAEnYiIiIiIiIiKga4BZ3oirmNS2Bh8RRqXhIHEREREBXEEnIiIiIiIiIqghaYoBMRE
RERERFVA0zQiYiIiIiIiIiKoBjujVXHh40ARBgCAI0NfXh60jIyIjI5Gfn4/MzEypTRAEmJub4+2338bu3bvVxnn48C
FmzJgBFxcXKBQK1KhRA71798b58+dL/Wb0nCmNp6enhxolasDLyvwLli1DQUGBrK+Dgw0WLvumdq9ly5bBwCFBVpe
XL4epU6fC1dUVhoaGsLGxga+vL3bu3InffvtNNG9NZebMmdJ8U1NTcebMGQICgCNHjmh8bv7+/ujevbw0DHv27AKA
Zd4nNDQUxsbG2Lx5s2y8p0+fok2bNujVq1dpPy4iIiIiIqIK4yFx/wIBAQGIi4tDYWEhfVjhBwwZMgT5+fmIiooCA
CQnJ8Pd3R050t1YtWoVAgMD8dNPP8HDwwMAUFbQAF9fX/zxxx9YvHgxWrVqhb/+gsxMTFo1aoVkp0T8fbbb0v3c3
d3R3JyMp4+fYr1t28jJSUfC+f0xZdfomULBSYmpqW/6cnBy0a9c0ubm5MdT3Llq0AE9PT0c0nQIKydPxokTJ3C
VLXSL1/+STT7Bv3z4kJydlUqLen//bf0+c0334SnpYk4uLqL072f2uXbuG50RK7Ny5Uy2W5++zdetWTJ8+HZcu
XZLqjIyM8Pbbb2Ps2LHw8fGBra0tAGDx4sW4cuUKkpKSyjV3IiIiIiIibTFB/xdQKBSwsbEBAISGhuLgwYNISkqSE
nRra2vY2NjAxsYG8+bNw8qVK3Hw4EEpQV+2bBm0HTuGs2fPwtPEwBgb2+PHTt2oFwrVhg8eDB++eUXCIIAANDT05
PuV6d0HTRp0gR+fn7w9PTEwoULMXfu3HLFP2XKFGRMZiIjIwN16tSR6p2dnRESEgJDQ0Po6f3/r6JSqZTFU0z5BB0
ABg8ejCLTpmDFihUwMTGR6uPj41GzZk106dJFLZbnxzQ3N4cgCGR3GTt2LL7++msMHToUe/bswcWLFzF9+nQkJCSg
Vq1a5Zo7ERERERGRtrjF/V/IyMgIhYwFavFhYX44osvAAD6+vpS/ebNm6UE+3k60jqYMGEc0tPTkZawVuo9XV1d0
aLTJ42r0qV5+vQptmzZgn79+smS82LFyXhF90vXD4WFhdi2bZtUJ4oi4uPjMWDAGaQPKwgC4uLi8MMPP+CLL75AeH
g4goKCpG3yJSkoKEBeXp6sEBERERERaYsJ+r/MyZMnsXnzZnTs2FGqa90mDZRKJQwNDREREQEHBwf07dtXas/IyED
jxo01jldcn5GRUea9XV1dkZmZwa54//77b9y9exeurq7luk4bVLZW6NmzJ+Li4qS6LJQUXL16FYMGDxqpsevXr49l
y5ZhXigRUHhJbPyvX17mNTEMTA3N5eKnZ3dS8VARERERESvFybo/wJ79uyREvDWrVvDy8sLK1eulNq3bt2Ks2fPY
teuXXBycsK6detgZWWLldiiKAKATL29rL7a9Kvo+BUxePBgHD58GFeuXAEAXMbGom3btnBxcXnpsQc0HAhbwLumGz
c05ubmZfaPjo5Gbm6uVK5du/bSMRARERER0euD76D/C/j4+GD16tXQ19dHnTp1p03rxavZdnZ2aNSoERolagSLUon
AwEckp6dL70s70zsjPT1d49gXL14EADRq1KjMOC5cuIAGDRpIn83MzJCbm6vLycnR0poa9asCUTLS1y4cEH7CZeD
r68v703dTER8fj8mTJ2Pnzp349NNPK218PT09rbfKKxQKKBSKsrs3ERERERER9XriC/i9gYmICJycn2Nvby94t16R9+
/by8PD0AvHnzpLrg4GAKJyervWf+90LTLF26FG5ubmrvp7/o4sWL2LdvHwIDA6U6V1dXnDp1Sq3vqV0npBVSHR0dBA
UFYdOmTbhx44Zu3/z8fDx58qTUe5dGAEAMHDG069evv+bNm6GjoyPb3k9ERERERPRvwQT9PygiIqJr167Fn3/+CQC
YMGEcWrZsiW7dumHbmtm34448/c0rUKOQGBuLChQtQqVSYLehPnjxBdnY2bty4gXPnzmHLYpV3749mjZtikmTJkn9
Jk6ciG+++QazZ89Geno60tPTMwf0H0zbtw8RERFSv/nz58P0zg6tWrXChg0bkJ6ejSuXLYM2NhZNmzbF/fv3X2q+A
wc0xI0bNzBlyhQEBwLtnQnIiIiIiL6t2CC/h/UtWtX0Dg4SKvohoaG+P777zFgwABMmTIFTk50CAgIgK6uLo4fPy
77DnQA0H/+PGxtbVG/fn14e3sjMTER0dHR+OGHH6BUKqV+b7/9Nr799lskJyejXbt2aNeuHfbv349vv/0WrVq1kvp

ZWlri+PHjCAsLw9y5c9GswT088847SEhIwMcff6zV+92lqV+/Pnx9fXH37t2XPhy0iIiIiIjoVRHE4l08iKhS5eXl
wdzcHJ5j10BXYfSqW6Fq7MzH/V91CERERERUHypzg9zcXJiZmZXYj4fEEVWxw3NDSv1HSEREREREBHCL0xERERERE
VGlWASdiIiIiIiIqBpggk5ERERERERUDfAddKIq5jUtgYfEUaL4SBwRERERAVxBjYIiIiIiIqoWmKATERERERERVQ
NM0KLU4eHh6Nmzp8Y2BwcHLFu2TPZZEARZqVevXqntgiBgwYIFUp8d03agVatWMDc3h6mpKdZd3REREQEAE8Pb2lnh
9cbGltYW7uzuGDRumFuvkyZNhb2+PvLw8xMfHw8LCotQ5axo/ICCgfA+PiIiIiIiIoHPg00Lwq2bNnY+jQodJnXV3d
UtsBwNTUFACQnJyM40BgZJ8/H927d4cgCEhPT8eBAwCAADt37sTjx48BANeuXUPLli2RnJwMd3d36V5//PEHWrduj
ffee09KqI8fP46L5Sdi//79Wn8feUBAAOLi4mR1CoVC28dARERERERUBkzQqVKZmprCxsamQu179uxBu3btMgNsjK
n02dLZWsG3srKS6h89egQAsLa2lo1Xs2ZNTJ06FU0GDMEvv/wCQ0NDDBw4EKNHj4aPj4/W81AoFKX0g4iIiIiIqLJ
xiztVGzY2Njh//jx++eWLXpnb6tSpsLW1xbhx4zBt2jQAQEXMTGWEWKqCggLk5eXJChERERERKbaYoF0lioqKg1Kp
lMqKFstKbVcq1UhJSQEAjB07Fi1atECTJk3g40CA40BgxMbGoqCgoFwx60npYc0GDdi2bRtWrlyJDRs2wMiofF9zt
mfPHrU458yZU+o1MTEMDc3l4qdnV257kLERERERK83bnGnSjVp0iSEh4dLn2vUqFFq0wDURVsXAGBiYoK9e/fi11
9/xcGDB3H8+HFERERg+fLl0HbsGIyNjbW0o3HjxggMDER0Tg5atGhR7nn4+Phg9erVsrrnt9hrEh0djYkTJ0qf8/L
ymKQTEREREZHWmKBTpapRowacnJwq3A4ADrs2RM0GDTfkyBBMnTovZs702Lp1KwY0HFiuWPT09KCnV7FfcRMTkzLj
fJFCoeBBckREREREVGHc4k7VmoODA4yNjZGfn/+qQyEiIiIiIqPSXEGnMuXm5iI1NVVWV9Z275Lcu3Cp2dnZsjpjY
20YmZlh5syZePDgATp37gx7e3vk50RgxYoVKCwshJ+fX0XD16ioqEhtTgYGBnBzcwPw7MC3F+PU09NT27JPRERERE
RUWZigU5LSuLLQrFkzWd2AAQMGnNb06dMxfff0Wd3w4c0xZs0atG/fHp999hn69++Pv/76C5aWlmjWrBn2798PFxe
XCsevyf3799XmZG9vj8ZMTADAvn37YGtrK2t3cXHBxYsXKzU0IiIiIiKiYoIoIUkrDoLovygvLw/m5ubwHLSGuory
nSJPrc5czH/d/1SEQERERURUqzglyc3NhZmZWYj++g05ERERERERUDXCL01EV0zw3pNS/kHEREREREQfCQSciIiIiI
iKqFpigEXEREREREVUDTNCJiIiIiIiIqGg+g05UxbymJfAUd9KI7cTERER0f04gk5ERERERERUDTBBJyIiIiIiIq
oGmKBXQHh40ARBgCAI0NfXh60jIyIjI5Gfn4/MzEyp7cVy/PhxAEB8fLysvnb2ujWrRv0nz8vu8/NmzcxfPhw1K9
fHwqFAjY2Nvd398exY8dk/Y4ePYrOnTvD0tISHoaGaNKkCRYvXoyioiJZP0EQYGHoiN9//11W37NnT4SHh6vN8+jR
o9DV1UVAQIBaW/E8U1NTNT6j+Ph4WFhYy05dWnnR/PnzoauriUULFkh1Dg40pY7h7e0t9Vu2bNk/8oyIiIiIiIqGc
xP0CgoICEBWVhauXr2KuXpNytWqVYiMjJTak50TkZWVJStvvvmm1G5mZoasrCzcuHEDe/fuRX5+Prp06YLHjx9LfQ
IDA5Gwlob169cjIyMDu3btgre3N+7cuSP1+eqrr9C+fXvUq1cPBW8exMWLFzF+/HjMmzcPwCHBEEVRFrcgCJg+fbp
Wc4yNjcxYsWNx5MgR/PHHHxV9VACg9iyySrJw7NgxKJVKjB49Wq1/XFwcJk+ejNjYWKnu1KlT0rU7duwAAfY6dEmq
27Lzp8Z7V+UzIiIiIiIiqiw8JK6Cile0ASA0NBQHDx5EUlISoqKiAADW1tZSuyaCIEjttra2mDBhArp3745Lly6hS
ZMmyMnJwZEjR5CSkoL27dsDA0zt7dGyZutpjZ8fAwd0hTdu3fH559/LtUPGTIEtWvXRvfuz3ZGYmIigoCCpbezYsV
i8eDEiIyPRpEmTEuPLZ89HYmIiTp06hezsbMTHx79U0vris3jw4AFGjBiBt956S221+9ChQ3j48CFmz56NDRs24PD
hw/Dy8kLnmjWlPLZWVgCAWrVqyVbqNc2jqP4RERERERFRZeIKeiUxMjJCYWFhha7NycnB5s2bAQD6+voAAKVSCaVS
iaSkJBQUFGi8bv+/bh9+7Zs5b5Yt27d40zsjISEBFL9mzZt0LVRV0RHR5ca09atW+Hi4gIXfXeEhYUHLi50baX5Z
Qwc0BA50TnYtm0b9PTkfYd5SqVQICQmBvr4+QkJKoFkPknfyqnxGLyooKEBeXp6sEBERERERAYsJeiU4efIkNm/ejI
4d00p1bdq0kZLs4vL8+865ub1QkPULMTGBpAUlmtxZgu7du8PV1RUa0KenH/j4eKxfvx4WFhZJo2Y7tpkyZgp9//lk
aIyMjAwDQuHFjYXG5urpKfZ4XEX0Dffv24YcffiXtqiVCMfHYQCebee/f/8+Dhw4UI6nUrKYmBjs2bMHX3/9NWru
qCFry8vLw44d06R7h4WYFv27RV0dqvyGwm6xtzcxCP2dnYVipmIiIiIiF5PTNARA+ePVAqLTA0NETr1q3h5eWFL
StXSulbt25Famqqr0jq6krtpqamSE1NxZkzZ7BmzRo0bNgQa9askd0jMDAQN27cwK5du+Dv74+ULBQ0b94c8fHxsn
4lrWyLoqjxADY3Nzf0799f2o7/okuXLuHkyZMIDg4G80yPBUFBQbL3wSvqf//7Hz766CPEX8fD09NTrX3z5s1wdHS
U2po2bQpHR0ds2bLlpe5b2c9Ik+joa0Tm5kr12rVrFY6XiIiIiIiIheP3wHvYJ8fHywevVq60vro06d0tLW9mZMTACA
nZ0dnJycSrxER0dHandldUV2djaCgoJw+PBhWT9D00P4+fnBz88P06dPx5AhQzBjxgyEh4fD2dkZAHdhwgW0adNG7
R4XL16Em5ubxvvPmjULzs70SEpKUmtTqVR48uQJ6tatK9WJogh9fX3cvXsXlpaWJT+YUmRkZCA0NBQffvgh+vTpo7
FPbGwszp8/L9v2/vTpU6hUKgwbNqzc96yqZ6SjQqGAQqEod4xEREREREQAV9ArzMTEBE50TrC3t5eS85cxYcIEpKW
l4auvviq1n5ubG/Lz8wEA777LqysrLB48WK1frt27cLly5cREhKicRw70zuMGTMGU6ZMKW29f/LkCTZs2IDFifL
Vv/T0tJgb2+PTZs2VWh+eXl56NGjB7y8vDBnzhyNfc6d04fTp08jJSVFdu/Dhw/j1KlT+0WXX8p936p4RkRERERER
FWBK+hV5Pbt28j0zpbVWVhYwNDQUGN/MzMaXW8Z8+euHPnDvr06YNBgbhjtFegKmpKU6fPo1FixahR48eAJ79kW
Dt2rUIDg7GsGHDMGBMGJiZmeHAgQ0YNGkSevfujb59+5YYY3R0NL744gv89ttv0inme/bswd27dzF48GCM5vL+vF
u3RsqlQpjxoyR6i5duqQ27osr0qIool+/fsjPz8cnn3yCv/76S+2amjVrQqVSoWXLlvDy8Ljrb926NVQqFZYUxVri
fDspimdRERERERUFbiCXkV8fXlha2srK2vtLR4/fjuwXliAbdu2QalUoLWrVli6dCm8vLzgeGBjz76CE0HDSwnn
34qd07d28cPHGq165dg5eXf1xcLXBkyRJmTovW7Zs0fh+dTerKytERUXh0aNHUPl1KpYkRv69acg48eyc+NTUVP/
30k1QXHBYMZs2aycQNGdzk1/3xxx/Ys2cPrL27BhcF7XNymTri19//RUBN25EYGcglgDAwOxcENG2fYfEa6uynxE
REREREVFVEMTK/04sIpLk5eXB3NwcnmPXQFdh9KrDoWrozMf9X3UIRERERPQPKM4NcnNZYWZmVmI/rqATERERERER
VQN8B52oih2eG1LqX8mIiIiIiIqArqATERERERERVQtM0ImIiIiIiIiIqAW5xJ6piXTMSeEgcSXgWHBERERGVhCvoR
ERERERERNUE3QIiIiIiIiKiaoAJ0hEREREREVE1wASdXlp4eDgEQcCIESPU2kaNGgVBEBaEhi7r+2IJCAiQrnFwcJ
DqjYm40DggL59++L777+XjZ2ZmQ1BEJCamqr37fjB7y9vWFubg6LuoK33ngDs2fPxp07d2T9Hj58CEtLS1hZweH
hw4dqsTs40GDZsmUVeyHERERERETLxASdKoWdnR22bNkiS30fPXqEhIQE1K9fX9Y3ICAAVWLZspKQKCDrM3v2bGRl
ZeHSpuVysGEDLCws40vri3nz5pUax9SpUxEUFIQWLVRgm2++wS+//ILFixcjLS0NX375pazvjh0740HhATc3N+zcu
fMlnwAREREREdHL4SnuVCmaN2+0q1evYuf0nejXrx8AY0f0nbCzs40jo60sr0KhgI2NTanjmZqaSn3ql68PLy8v2N
raYvr06ejduzdcXFzUjrjL58iTmz5+PZcuWYfz48VK9g4MD/Pz8kJOtI+uvUqkQFhYGURShUqmkuImIiIiIiF4FrqB
TpRk4cCDi4uKkz7GxsRg0aFcljT9+/HiIooivv/5aY/umTZugVCoxatQoje0WFhbSf//66684duwY+vbtI759++Lo
0a04evXqS8VXUFCavLw8WSEiIiIiIiIWE3SqN0+//z60HDMczMxM/P777/jxxx8RFham1m/Pnj1QKpWyMmfOnDLht
7KyQqlatZCZmamx/fLly3B0dIS+vn6ZY8XGxqJTp07S0+gBAQGIjY0t87rSxMTEwNzcXCp2dnYvNR4REREREb1euM
WdKk2NGjXQpUsXrF+/HqIookuXLqhRo4ZaPx8fH6xevVpWZ2VlpdU9RFGEIAjlbnteUVER1q9fj+XLl0t1YWFhMDb
hAmbNmGvdXV2tYnLRdHQ0Jk6cKH30y8tjkk5EREREREPjgk6VatCgQRgzZgWA4LPPPpYx8TEBE50TUEu+/bt27h1
6xYaNGigsd3Z2RLHjhBYWFhQavo3377L7f7880EBQXJ6ouKirB//3506tSp3LEBz96tVygUfbbqWjIiIiIiIw9ypU
gUEB0Dx48d4/Pgx/P39K3Xs5cXUQ0dHBz179tTYHhoaiVV372PVqlUa24sPiV0pVAg0DkZuqaqs90vXdyqVqljJjI
IiIiIiI0hZX0KLS6erq4sKFC9J/a1JQUID57GxZnZ6enmw7/L1795CdnY3CwkL89ttv2LhxI9atW4eYmJgSV99btWq
FyZmNiYiIAn/++Sd69eqF0nXq4MqVK1izZg3atWuH0NBQ7N69G7t27YKHh4fs+gEDBqBLly64desWatasCQD4888/
1b5nvX79+lpvySciIiIiIiIwV9Cp0pmZmchMzKzE9n379sHW1lZW2rVrJ+szffp02NrawsnJCe+//z5yc3Nx4MABR
EVFLXrvhQsXYvPmzThx4gT8/f3h7u60iRMn4a0033sCAAQ0wYcMGmJiYoGPHjmrX+v4wNTUVPZ96Z988gmaNWsmK7

oThw4eX0bYoigAgbW8HABcXF6SmpuLUqV0YN28emjZtinzn5mkdr4mJcFbu3YsrV65g2rRpUCqViIiIQMuWlfHgwY
MSr4u0jkZubq5Url27pvU9iYiIiIImKDTP8LQ0BB+fn6YPn06jh49ivDwcMyYMUNqnzRpELJTU/H777/j/v37WLR
oEXR0nv160js7Iz09Xe04Fy9eBAA0atRIqjMwMICTkxPc3d0xZcoUNG3aFCNHjix3zA0bNsSQIU0wbt06/PTTT0hP
T8fWrVtL7K9QKGBmZiYrRERERERE2mKCTq+Em5sb8vPzpc81atSAk5MT6tSpI1sNB4Dg4GAKJyervWf+90LTLF26F
G5ubmrvpz/vo48+QkJcAn766acKx+vg4ABjY2NZzERERERERJWJp7hTlbp9+zb690mDQYMG4Y033oCpQsL0nz6NRY
sWoUePhlqNMWHCBH99dfo1q2b7GvW5s+fjwsXLiA50VktqX+eo6MjevTogenTp2PPnj1l3m/mzJL480AB0nfuDHt
7e+Tk5GDFihUoLCyEn5+f1nMnIiIiIiIqDyboVKWUSiVatWqFpUuX4tdff0VhYSHs70wwd0hQTJkyRasxDA0N8f33
3yMmJgZTPkzB77//DlNTU/j4+0D48ePw8PAoc4yIiAi0bdsWJ06cQKtWrUrt2759e3z22Wfo378//vrrL1haWqJZs
2bYv38/XFxtIqZiIiIiIioVAsx+J0tIqpUeXL5MDc3h+fYndBVGL3qcKiSnfm4/6s0gYiIiIj+JYpZg9zc3FLPqu
IK0LEV0zW3hAfGERERERFRmXhIHEREREREVE1wASdiIiIiIiIqBpggk5ERERERERUDfAddKIq5jUtgyfE/YfwdG
iIiIiIqipcQSciIiIiIiIqBpigExEREREREVUDTNCrUH2ZNSa0H0tHR0coFARy2dmhW7du0HDggNTn6NGj6Ny5Mywt
LWFoaIgmTZpg8eLFKCoqko0lCAIEQcDx48dl9QUFBbC2toYgCEhJSaLQ/8zMTAiCgNTUUVLU590zZE+Hh4dJnb29vC
IKALVu2yPotW7YMDg400uf4+HhYWFjI+jx+/BiLFi2Cp6cnjI2NUaNGDbRt2xZxcXEOlCyU9T169Ch0dXUREBAg1Y
WHh0vzKqkU9+vZs6dsVgVXrmHw4MGoU6c0DAwMYG9vj/Hjx+P27duyftR0j4iIiIiIqLIXa8imZmZePPNN/H9999
j0aJFOHfuhPbt2wcfHx+MHj0aAPDvV1+hffv2qFevHg4ePIiLFy9i/PjxmDdvHoKDgyGkomXMOzs7xMXFyEq++uor
KJVkjTGut7+2DA0NMW3aNLWkuJSPHz+Gv78/FixYgGHDhuHo0aM4efIkRo8ejZUrV+L8+f0y/rGxsRg7diy0HDMCP
/74AwCwfPlyZGVLSQUA4uLi10pedPXqVbz11lvIyMhAQhKICrly5gjVr1uDAGQNo3bo17ty589LzIyIiIiIe1LMOK
vIqFGjIAGCTp48id69e8PZ2Rnu7u6Y0HEijh8/jvz8fAwd0hTdu3fH559/jqZNM8LBwQFDhgZB+vXrsX37di0mJsR
GHDBgALZs2YKHDx9KdbGxsRgwYIDGGMrbX1shISHIzc3FF198ofU1y5Ytw+HDh3HgwAGMHj0aTZs2ha0jI0JDQ3Hi
xAK0atRI6pufn4/ExESMDHkSXbt2RXx8PADA3NwcNjY2UgEACwsLtbOxJR49GgYGBti/fz/at2+P+vXro10nTkh0T
saff/6JqV0nvvt8iIiIiIIXhYT9Cpw584d7Nu3D6NHj4aJiYlau4WFBfbv34/bt28jMjJSrb1bt25wdnZGQkKCrP
7NN99EgWYNsGPHDgDPtm0fPnwY77//vsY4yttfW2ZmZpgyZQpmz56N/Px8ra7ZtGkTfH190axZM7U2fX192XPaunU
rXFxc40LigrCwMMTFxantJtDwnTt3802332LUqFEwMpKfPg5jY4N+/fph69atsvErMj/g2esDeXl5skJERERERKQt
JuhV4MqVKxBFEa6uriX2ycjIAAA0btXYY7urq6vU53kDBw5EbGwsgGfbuzt37oyaNWuWeJ/y9tfWqFGjYGhoiCVLl
mjV//Lly6U+j+epVCqEHYUBAAICANd//n3Ze/vLcfnyZYiIiW0JzbtY4Me7evYtbt27J6ss7PwCiIyMubm5V0zs7C
oUMxERERERvZ6YoFeB4tXY4kPLt0mrqV7T9WFhYTh27BiuXr2K+Ph4DBo0qNTxy9tfWwqFARnNz8bHH3+Mv//+u8z
+Jc3nRZcuXcLJkycRHBwMANDT00NQJDD0R4bKVtLPqrzzA4Do6Gjk5uZK5dq1a5UeLxERERER/XcxQa8CjRo1giAI
uHDhQol9nJ2dAaDEPhcvXpS9l13M2toaXbt2xeDBg/Ho0SN06tSp1Fi06W9ubg4AyM3NVWvLycmR2l8UFhYGBwchZ
J07t9QYgGfzLe15FF0pVHjy5Anqlq0LPT0960npYfXq1di5cyfu3r1b5vUvcnJygiAISE9P19h+8eJFWFpaokaNGm
pt5Zkf8CypNzZkxUiiIiIiIjTmUGvAlZWvVd398dnn32m8R3mnJwcvPUvu7CyssLixYvV2nft2oXLly8jJCRE4/i
DBg1CSko+fvD1ld3TLjKau/paUlatasiV0nTsnqH58iPPnz8PFxUXjuDo60oiJicHqlauRmZLZagyhoaFITK7G
2bNnldqePhmC/Px8PHnyBBs2bMDixYuRmpoqlbS0NNHj622TPk1lZvVF1tbW8PPzw6pV2SH5QHPvgZv06ZNCaOK0
ri6X575ERERERERvSwm6FVK1apVKCoqQsuwLbFjxw5cvnwZfy5cwIoVK9C6dWuYmJhg7dq1+PrrrzFs2DD8/PPPyM
zMhEqLQnh40Hr37o2+fftqHDsgIAC3bt3C7NmztYpFm/6RkZGYP38+vvzyS/z66684ffo0+vfvDz09Pe19cE26d0m
CVq1aYe3ataXG8MEHH6Bt27bo2LEjPvvsM6SlpeHq1atITExEqLatcPnyZezZswd3797F4MGD4eHhISu9e/eGSqXS
ar4v+vTTT1FQUAB/f38cPnwY165dw759++Dn54e6deti3rx5Lz0/IiIiIiKil8UEvYo0aNAAP/30E3x8fBAREQEPD
w/4+fnhwIEDWL16NQCgd+/eOHjwIK5duwYvLy+4uLhgyZiLmDp1KrZs2VLI09uCIKbgjRowMDDQKhZt+kdGRmLu3L
n45JNP40npiZ49e0IURfzww9lbtVeuHAHj16VGofhUKB7777DpMnT8batWvx9ttvo0WLFlixYgXGjRSHDw8PqFQ
q+Pr6atxSHxgYiINTUVPz0009azf15jRo1wunTp9GwYUMEBQWhYc0GGDZsGHx8fHds2DFYVWm99PyIiIiIiIheLiBW
9PuriKhUeXL5MDc3h+fYndBVGL3qKiSnfm4/6s0gYiIiIj+ZYpZg9zc3FIXQLmCTkRERERERFQN6L3qAIj+6w7PD
eGJ7kREREREVCau0BMRERERERFVA0zQiYiIiIiIiKoBJuHERERERERE1QDfQSeqYl7TEniK+78UT2wnIiion8SV9
CJiIiIiIiIqgEm6ERERERERETvW8uQ08PD0fPnj3V6lNSuiAIAnJycqT/1lSys7Nl112/fh0GBgZwdXXVeD9BEJC
ULCR9njLzZoljF5fMzEzMNdkTTZs2VRsvMzMTgiAgNTW1XPN+9913oauri+PHj6ulhYeHqXaELFiwQFafLJQEORck
z88/Fx0dHZibm6NZs2aYPhkysrKytI6lpGeQnJwstRfP3cHBodRn5e3tLev34vw++ADqU9p937+53f16lWEHISgT
p06MDQ0RL169dCjRw9kZGRIFQ4ePAGfHx9YVwNB2NgYjRo1woABA/DkyR0tnwMREREREVF5/0cS9PK4d0KsSrKyZK
VWrVqyPvHx8ejbty8ePHiAH3/8scwXyMjZePvq1cPs2fPltXZ2dlV6jz++OMPHDT2DGPgJfIKpdLx9DQEASLsT
du3fLH0/SpUu4ceMGTp06haioKQnJ8PDvWpznP3T0iZ3d3e1Z+vl5aXW79SpU1L7jh07pPsU1+3cuVM2h6ioqArd
+8iRIWCAx48fw8/PD315edi5cycuXbqErVw3PDA7m5uQCA8+fPo10nTmjRogU0Hz6Mc+f0YEXklDVM218fTp0+1f
gZERERERETl8VofElerViLYWFiU2C6KIuLi4rBq1SrUq1cPKpUKbdu2LXVMpVIJpVIpfdBv1YwPqSLsbGwqK2w1cX
Fx6Nq1K0a0HImlVlti2bJLMDExkFxx9fXFLStXEBMTg0WLFpU6XvFzsbGxgb0zM3r06IFmzZph5MiRUqJbFj09Pa3
mXLNmTem/raysZPd/0fDhw7F69Wr873//Q+f0Nst07/T0dFy9ehXff/89703tAQD29vayn+t3330HW1tb2XNq2LAh
AgICypwPERERERFRb3WK+hLOXjwIB48eABfX1+8//77SExmL179151WDLf0QICwuDq6srnJ2dkZiYqNZPV1cX8
+fPx8qVK3H9+vVy3cPIyAgjRozAjz/+iJs3b1Zw60Xm40CAESNGIDo6usIr2TVr1oS0jg62b9+0oqIijX1sbGyQlZ
WfW4cPl2vsgoIC50XlyQoREREREZG2/pMJ+p49e6SV70LSqVMntX716tWT9XFxcZG1q1QqBACHQ1dXF+7u7nBycsL
WrVsrLc5z586pxenu7l6uMZKtk/HgwQP4+/sDAMLCwkrC5t6rVy80bdoUM2bMKHesxe9wZ2ZmatX/xbm1bNmy3PfU
ZNq0afjtt9+wadMmre+TVCoXZMGQAEDdunWxYsUKTJ8+HZaWlujQoQPMzJmDq1evStf36dMHISEhaN++PWxtbDGrV
y98+umnZSbcMTExMDc3l0plv8pARERERET/bf/JBN3Hxwepqamysm7d0rV+P/zwg6zPt99+K7Xl50Rg586dCAsLk+
rCwsIQGxtbaXG6uLioxfm//2vXG0oVCoEBQVBT+/Z2wohISE4ceIEL26pLH/woULsX79eqSnp5frPqIoAoDsULn
SvDi34vfLX1bNmjURGRmJ6dOn4/Hjx1rd0zU1FfPmzZPaR48ejezsbGzcuBGtW7fGtm3b407uju+++w7As90GcXfX
uH790hYtWoQ6dep3rx50rvtJYm0jkZubq5Url27VilZJiIiIiKi18N/8h10EXMT0Dk5yeo0betu0KBBie+gb968G
Y8ePUKrVq2k0LEU8fTpU6Snp8PNze2l4zQwMFCLszjR1sad03eQLJSEwsJCrF69WqovKipCbGwsFi5cqHaNl5cX/P
39MwXKFISHh2t9rwsXLgB4ts1cG5rmVlkmTpyIVatYdWqVrW+6t6mpKbp3747u3btj7ty589LzIyIiIiIe1LMOK
3L7//328//77mDtl3LpydnbFmzRrMmjVL45gKhQIKhLiEyMiIiIiIotf3IFvTKoVCPERETfVmhT0tLg4+NTqavo
L2PTpk2oV68e0tLSZHEuW7YM69evL/ErwRYsWIDdu3fj6NGjWt3n4c0H+Pzzz+HL5SU7101VUSqV+0ijzBv3rxKe
c+7+GvY8vPzS+xjawkJW1vbUvsQEREREREG9jP/kCrq2bt68iUEPHsnqrK2ctf78efz000/YtGmT2vefh4SEY0rUqY
iJiYG+vJ4A4Lfff1P73nInJyFZae5VQaVSoXfv3vDw8JDV29vbIyoqCnv37kWPJ3UrmvSpAn69euHLStXahy3+Ln
cu3cPZ86cwaJFi/D333/LvvLSVRs2bBiWLl2KhIQE2S4HAHjy5Ina99kLgoDatWsJNTUVM2bMwPvvvw83NzcYGBjg

0KFDiI2Nlb7Cbe3atUHNTUwvXr3QsGFDPhr0CBs2bMD58+dLFGZEREREREQv67V00F88FA4Ajh07hk2bNsHNzU0t0
QeAnj17YuTIkdI9ezfee+89AM+2XL/o4MGD8Pb2rvSYi505cwZpaWn44osv1NpMTU3x7rvvQqVSAuZQAWDOnDkaT3
sHnj0XQRCgVCrh60iId999FxmNtQzSr4orL319fcyZMwehoaFqbefPn4etra2sTqFQ4NGjR6hXrx4cHBwwa9YsZGZ
mQhAE6f0ECRMAAC1btsSRI0cwYsQI3LhxQzq8LykpCe3bt/9H5kdERERERK8fQSw+/YuIKlVeXh7Mzc3h0XYNdBVG
rzocqoAzH/d/1SEQRER0X9AcW6Qm5sLMz0EvvvHXQIiIiIiKiauC13uJe3Y0YMQIBn27U2BYWFOy1a9b8wxE9U
9q79d988w3eeeedfzCa6u/w3JBS/0pGREREREQECIt7tXbz5s0STyk3MzNDRVq1/uGInrly5UqJbXXr1oWREbdzA9
pvYyEiIiIiov82bXMDrqBXY7Vq1XpLSXhpqr7zYmIiIiIiF5nTNCJqpjXtAQeEvcP4sFuRERERPRvxUPiIiIiIi
IiKoBJuHERERERERE1QATdCiIiIiIiIqJqoNom60Hh4RAEAQsWLJDVJyULQRAEAEBKSgoEQdBYsr0zsw/fPum/n2dj
YwM70ztZ3fXrlyEIAvbw3w8AuHr1KkJCQlCnTh0YGHqIXr166NGjBzIyMso1j2HDhkFXVxdbtmxRa5s5cyyEQcCIE
SNk9ampqRAEAZmZmQCAzMxM2dxMTU3h7u600aNH4/Lly1rHEh8fD0EQ0LhxY7W2xMRECIIABwcHtbaHDx/C0tISVl
ZWePjwocaxd+zYgQ4d0sDS0hLGxsZwcXHB0EGDcPbs2XKNV/xMSiqzZs2S5mJhYaE2t4CAANL40Tk5EAQBKSkpUll
JYz//M1q7di08PT1hYmICCwsLNGvWDAsXLtQ4dyIiIiIiospQbRN0ADA0NMTChQtX9+7dUvtdunQJWVLZslKrVi20
a9c0enp6suTswoULePT0EfLy8mRfF3bw4EHO6+ujbdu2ePz4Mfz8/JCXl4ed03fi0qVL2Lp1Kzw8PJCBm6t1/A8eP
MDWrVsxadIkqFSqEueoUqm0SvyTk5ORLZWfTL00zJ8/HxcuXICnpyc0HDigdUwmJia4efMmjh07JquPjY1F/fr1NV
6zY8c0eHh4wM3NDT37LRrj4qKQlBQeJo2bYpdu3bh/Pnz+Pzzz9GwYUNMmTKLXONFRkaq/SyzsrIQHh40CwsLhIA
Gljg3PT09HDhwaAACPhizz0cTFxando2fPngAALUqFiRMnYty4cUHL80PP/6IyZMn4/79+2W0S0REREREVFHv+hr3
X19fXLlyBTExMVi0aFGJ/WrVqiVbT52mVCrRokULpKSkIDg4GMCzVfd27dpBFEWkpKRIXxmWkpKCLi1bwsTEBkmq
bh69Sq+//572NvbAwDs7e3Rtm3bcsW/bds2uLm5ITo6Gra2tsjMzFRboXZxcUGtWrUwbd00JCYmljgetbU1bGxsAA
C0jo7o1q0b0nbsiMGDB+PXX3+Frq5umTHp6ekhNDQusbGxaN26NYBnuwdSULIwYcIEJCQkqF2jUqkQFHYGURShUqn
Qr18/qe348eNYtGgRli9fjnhJxkn1DR00QPv27SGKYrnGUyqVUCqVsv6bNm3Cl19+ib1796JR00Ylzs3ExAR9+/bF
hx9+ibMnTpT6HCwsLKRn+aLdu3ejb9++GDx4sFTn7u5e6nhEREREREQvq1qvo0vq6mL+/PLyUxILrl+/XqExfHx8Z
CuqBw8ehLe3N9q3b69W7+PjAwCoWbMmdHR0sH37dhQVFVU4/uJE1NzcHJ07d0ZcXJzGfgsWLMCOHTtw6tSpco2vo6
OD8ePH4/fff8eZM2e0vm7w4MHYunUrHjx4A0DZ9vCagADUrl1bre+vv/6KY8e0oW/fvujbty+0Hj2KqlevSu0JCQl
QKpUYNWqUxnsVv46g7XgvOnPmDIYOHY0FCxbA39+/zLnNdKt586dw/bt28vsWxIbGxscP34cv//+e7muKygoQF5e
nqwQERERERFpq1on6ADQqlcvNG3aFDNmzCixT7169aSVV6VSCRCXf6nN29sbGRkZyMrKAgAcOnQI7du3R/v27aWt7
9euXcNvv/0mJeh169bFihUrMH36dFhaWqJDhw6YM2d0qYnkiy5fvozjx48jKCgIABAWFoa4uDg8ffpUrW/z5s2l1d
/ycnV1BQDPfXVtNG3aFA0bNsT27dshiiLi4+MxaNagjX1jY2PRqVMn6Z3xgIAAxMbGSu0ZGRlwdHSEnt7/b8ZYsmS
J70fx/GsBZY33vJs3b6JXr1547733EBkZqdXc6tSpg/Hjx2Pq1Kl48uRjif1CQkJKMSqVSunn02PGDFHYWMBWQEu
Li4IDw9HYmKixp/d82JiYmBubi6VF885ICiIiIiIkK21T9ABY0HChVi/fj3S09M1tv/www9ITU2Vyrfffiu1tW3bF
gYGBkhJSUF6ejoePnyI5s2b480330ReXh4uX76MgwcPQqFQ0E2bNtJl0ePRnZ2NjZu3IjWrVtj27ZtchD3x3fffa
dVzCqCv7+/qhRowYAOHPnzsjPz0dyrcLG/nPnzSUPP/hgWKNreIt5C+uVJdl0KBBiIuLw6FDh3D//n107txZrU9
RURHWr1+PsLAwq54sLAzr16+X7Sx486DBglCamoqlq5di/z8fCLGbccDMLCQvTu3Ru1a9fGunXryjYw3Kgo3Lp1
q8TEHwCWLl0q+51JTU2VEMPbw1sc03YM586dw7hx41BYWIGBAWYgICCg1CQ90joaubm5Url27Vq54YiIiIiotdbt
X4HvZiXlxf8/f0xZcoUhiEhQ7U3aNB44zvoAGBsbiYwLVvi4MGDUHPnDqtlaye9q92mTRscPHGQx44dQ+vWRWFOaC
i71tTUFN27d0f37t0xd+5c+Pv7Y+7cufDz8ys13qKiImzYsAHZ2dmyleWioiKoVCq8++67atc0bNgQQ4c0xYcflj
igXKaXlhwQXoG5dGvXz9MnjwZM2f0RP+/wVxFvv222/x559/SrsAnp/H/v370a1TJzRq1AhHjhxBYWEh9PX1ATx7
v9vCwkLttQRtxis2btw4ZGRk4PTp02o/l7JYWFgg0joas2bNQteuXTX2sbGxkc4fKImHhwc8PDwwevRoHDlyBO+88
w40HTok7bR4kUKhgEKHKFesREREREREExf4VK+jAs/e0d+/ejaNHj5b7Wh8fH6SkpCALJQXe3t5Sffe295SULBKTrm
KCIMDV1RX5+fl13u9///sf7t27h7Nnz8pWalDt24akpCTcvn1b43XTp09HRkaGxq9k0+Tp06dYsWIFGjRogGbNmm1
1TTERkYt0794dhw4dKnF7u0q1QnBwsNpKc79+/aQ/IoSEh0D+/ftYtWpVmffUzjwA+PzzzxEbG4ud03eiXr165ZpX
sbFjx0JHRwflly+v0PUvcnNzAwCtfv5EREREREQV8a9YQqEaJk2aoF+/fli5cqVa282bN/Ho0SNZnbW1tbSi6+Pjg
zlz5iArK0v2LnP79u2xYMEC3Lt3T5agp6amYsaMGXj//ffh5uYGAwMDHDp0CLGxsYiKiiozVpVKhS5dusDT01NW7+
7ujg8++AAbN27E+PHj1a6rXbs2Jk6ciI8//ljjuLdv30Z2djYePhiAX375BcuWLCpJkyexd+9erU5wf1F8fDxWrVo
Fa2trtbZbt25h9+7d2LVrFzw8PGRtAwYMQJcuXXDr1i20bt0aERERIiIiIw0+/4733nsPdnZ2yMrKqkqlgiAIONHR
0Xq8jIwMjB07Ft0nT4ejo6Pad9gbGRnB3Ny8zLkZGhpilqxZGD16tMb2nJwctbFNTU1hYmKCKSNHok6d0ujQoQPq1
auHrKwszJ07FzVr1pR0viciIiIiIqps/5oVdACYM2e0xq/tcnFxa2traw8f6p569atpa3Hb775p1TfokULFBUVwc
jICKlatZL69WbWbCB8yaQuWtrVC8+bNsXz5csyaNqT0t4Nca//voLe/fuRWBgoFqbIAh47733St3CPmnSJLW
vGSvm6+sLW1tbnGNsBB9++CeAN26Mn3+/ucvZ/5IYGRlpTM4BYM0GDTAMUHHjh3V2nx8fGBGaooov/wSAPDnJ5J9g
8+bN0Hv2LLp27YpGjRqht58+ePr0KY4d0WyzMz0tx1u3bh0eP36Mad0mqf1MbW1tNf5hoyQDBgyAo60jxraBAweqj
V38xx9fX18cP34cfff0gb0zMwIDA2FoaIgDBw6U+LyIiIiIiIheliBqyniJ6KXl5eXB3NwcnmPXQFdh9KrDew2c+b
j/qw6BiIiIiEim0dFizc2FmZLZif3+NVvcif6tDs8NKfUfIREREREREfAv2+JeXcyfP1/t07SLy/Mnkf/T3N3dS4x
r06ZNrywuiIiIiIiKhu3uFfAnTt3c0f0HY1tRkZGqFu37j8c0T0//47CgsLNbbVrl0bpbqam/3BERzdt7EQERER
EdF/G7e4VyErKytYwVm96jDU2Nvbv+oQiIiIiIiIqIKYoBNVMA9pCTwk7h/EQ+KIiIiI6N+K76ATERERERERVQNMO
ImIiIiIiIiQASbo9I+7efMmhg8fjvr1600hUMDGxgb+/v44duyY10fo0aPo3LkzLC0tYwhoicZnmDx4sUoKipSG+
/gwYPo3Lkzrk2tYwxsDDc3N0RERODPP/8EAKSkpEAQB0TK5Khd6+LiAgMDA6nv87y9vfHBBx9U2ryJiIiIiIhKwwS
d/nGBgYFIS0vD+vXrkZGRgV27dsHb21s6Gf+rr75C+/btUa9ePRw8eBAXL17E+PHjMW/ePAQHB+P5Lx5Yy3YtFH19
YWNjgx07diA9PR1rlqxBbm4uFi9eXGocR44cwaNHj9CnTx/Ex8dX5ZSJiIiIiIjKxEPi6B+Vk50DI0eOICU1Be3bt
wfw7PT5lilbAgDy8/Mxd0hQd0/eHZ9//rl03ZAhQ1C7dm10794diYmJCAoKwvXrlzFu3DiMGzc0S5culfo60DjAy8
tL44r581QqFUJDQ9G+fXuMHj0aU6ZMGSAIlt9pIiIiIiIiLXAFnf5RSqUSSqUSSULJKCgoUGvfv38/bt++jcjISLW
2bt26wdnZGQkJCQCAbdu24fHjx5g8ebLGe1lYwJQYx71797Bt2zaEhYXBz88P+fn5SELJqdCcihUUFCAvL09WiIiI
iIiItMUEnf5Renp6iI+Px/r162FhYYG2bdtiypQp+PnnnwEAGRkZAIDGjRtrvN7V1VXqc/nyZiZmCHWlrbccwZs
gWNGjWCu7s7dHV1ERwcdJVKVcFZPRMTEwNzc30p2NnzVdR4RERERET0emGCTv+4wMBA3LhxA7t27YK/vz90eILQvH
lZ2Xvgz79n/jxRFKVt6M//d3mpVCqEhYwJn8PCwrBz584yt8WXJjo6Grm5uVK5du1ahcciiIiIqLXDn0eIUmdQ3
h5+eH6d0n4+jRowgPD8eMGTpG70wMALhw4YLG6y5evIhGjRoBAJydnZGbm4usrKxy3Ts9PR0nTpzA5MmToaenBz09
Pbz99tt4+PChth2+IhQKBczMzGSFiIiIiIhIW0zQqVpwc3NDfn4+3n33XVhZWwk8gX3XrL24fPkyQkJCAAC9e/eGg
YEBFi1apHHMklbDVSoVvLy8kJaWhTUVKlMnjz5pbe5ExERERERVRRPcad/103bt9GnTx8MgjQIb7zxBkxNTXH69G
ksWrQIPXr0gImJCdauXYvg4GAMGzYMY8aMgZmZGQ4c0IBJkyahd+/e6Nu3LwDAzs40S5cuxZgxY5CX14f+/fvDwcE

B169fx4YNG6BUKtUS/cLCQnz55ZeYPXs2PDw8ZG1DhgzbokWLkJaWBk9PTwDARVu3kJqaKutnY2MDGxubqntIRERE
RET0WuIK0v2jLEoLWrVqhaVLl8LLyweHh746K0PMHToUH266acAnq2MHzx4ENeuXY0XlxdcXFywZMkSTJ06FVu2b
JG9dz5q1Cjs378ff/75J3r16gVXV1cMGTIEZmZmGk+C37VrF27fvo1evXqptTVq1AhNmjSRraJv3rwZzZo1k5U1a9
ZUwZMhIiIiIqLXnSCwDBoXEB2UvLw8mJubw3PsGugqjF510K+NMx/3f9UHEBERERHJF0cGubm5pZ5VxRV0IiIiI
iomqgQu+g//bbb2jQoEFLx0L0n3R4bghPdCciIiIiojJvAAXdyckJPj4+2LhxIx49eLTZMRERERERERG9diqUoKe
paFzS2aIiIiAjY0Nhg8fjpmNt1Z2bERERERERESvjQo16B4eHliYZan+/PNPXMxFITs7G+3atY07uzuWLFmCW7duV
XacRERERERERP9pLXKKe0FBAVatWoXo6Gg8fWvY+vr6CAoKwsKFC2Fra1sZcRL96/AU96rBU9qJiIiI6N/mHznF/f
Tp0xglahRsbW2xZMKsREZG4tdff8X333+PP//8Ez169HiZ4YmIiIiIiIeGxU6xX3JkiWiI4vDpUuX0LlZz2YsAG
d03eGjs6zfL9BgwZYu3YtXF1dKzVYIiIiIiIiov+qCq2gr169GqGhofjjjz+QLJSErL27Ss15sfr16001ULVKkFVJ
EIRSS3h4uFo/pVIJT09PxMfHaxxz8+bN0NXVxYgRI6S6M2f0QBAEHDlyR0M1/v7+6N690WagPDxcYyWBAQFSfWC
HB yxbtuy15v7uu+9CV1cXx48fV2srjmHBggWy+qSkJAiCIH10SUmR4tPR0YG5uTmaNWuGyZMnIysrS+tYzS6ciaZnm5
bYXlRUhKVLl+KNN96AoaEhLCws0KLTJ/z4449qfR8/foxFixbB09MTxsbGqFGjBtq2bYu4uDgUfHbK+h49ehS6urq
yZ1ssMzMTgiAgNTVV63kQERERERFVVLkT9CdPnqBfv34ICWuDjY1NiF0MDAwYMCALwrun5CVLSWVZcuWwcMTFa3
fPlyqW9cXByysrKQlpaGoKAGDBw4EN9++63amLGxsZg8eTK2bNmCBw8eAADefPNNeHp6Ii4uTq3/tWvXkYjcjMGDB
0t1AQEBsjjysrKQKJBQafP+448/c0zYMYwZM6bEP6QYGhpi4cKFuHv3bpnjXbp0CTdu3MCpU6cQFRWF50RkeHh44N
y5cy8dqyKCA40xuzZsFu3DhcuHABhw4dgp2dHby9vZGULCT1ffz4Mfz9/bFgwQIMGzYMR48excmtJzF69GisXLk
S58+fL40dGxulSWPH45iRI/jjjz9e0LYiIiIiIqKKKneCrqenH8WLF60oqKgq4vnH2djYSMXc3ByCIKjVFb0wsICN
jQ0aNmyIKV0mwMrKCvv375eN15mZiaNHj+LDDz+Eq6srtm/fLRUNHjwYiYmJyM/Pl10THx+PmjVrokuXLlKdQqGQx
WFjYwNLS8tKm3dcXBy6du2KkSNHYuvWrWoxAYCvry9sbGwQExNT5ni1atWCjY0NnJ2dERwcjB9//BE1a9bEyJEjXz
rWxMREbN++HRs2bMCQIUPQoEEDeHp64vPPP0f37t0xZMgQKf5ly5bh80HD0HDGAEaPho2mTzVc0dERoaGh0HHiBBo
1aiSNm5+fj8TERIwcORJdu3YtCUCERERERHRP6FCW9w7duyILJSUSg7L360oqAiJiYm4c+c09PX1Zw2xsbHo0qUL
zM3NERYWJlud7tevHwoLC7Ft2zapThRFxMfHY8CAADTq9CRA0UmiLi4uIQFhYGV1dX0Ds7IzExUa2frq4u5s+fj
5UrV+L69evluoeRkRFGjBiBH3/8ETdv3nypeDdv3gxnZ2d069ZNR50iIgK3b9/Gd999BwDYtGkTfH190axZM7W++v
r6MDExkt5v3boVLi4ucHFxQVHYGOLi4vAyX2pQUFCavLw8WSEiIiIiITJWhRL0Tp06ITo6GpGRkUhISMcuXbtk5b8
qJCQESqUSCoUCUFBSLKypAhQ6T2p0+fIj4+HmFhYQCA40BgHDT2DFeuXAEAWFLZoWfPnrJt7ikpKbh69SoGDRok
u9eePXugVCplZc6c0ZUy+jTkZDx48AD+/v4AoPaHh0f16tULTZs2xYwZM8p9n+JDAjMzMyscKwBkZGSgcePGGtuK6
zMyMgAaly9f1vpwQpVKJf2sAgICcP/+fRw4cKDCccBExMDc3FwqdnZ2FR6LiIiIiIhePxVasi3etrxkyRK1NKEQ/j
Pb31+0d0LS+Pr64tqla5g4cSImTJgAJycnqX3//v3Iz89Hp06dAAA1atTAu+++i9jYwMyfPx/As23u7777Lq5cuQI
nJyfExsaibdu2cHFxkd3Lx8chq1evltVZWlVlyjxUKhWCGoKkFfuQkBBMmjQJly5dUosDABYuXIgOHTogIiKiXPcp
Xo1+/LC5qlJ8D1EUtbrfpuUxCPkSezcRPA1c3goKCEBsbc19f3wrFEB0djYkTJ0qf8/LymKQTEREREZHwKpSgP
336tLLj+fewsBGBK5MTNjYcsG3bNjRr1gxvfvUW3NzCADz3bn7nzh0YgxtL1zx9+hRnz57FnDzoKurC19fX9jb2y
M+Ph6TJ0/Gzp078emnn6rdey8TERJb8V5Y7d+4gKSkJhYwFsj8AFBUVITY2FgsXL5L7xsvLC/7+/pgyZYP0qr02Lly
4A0DZifMvwnZGenp6aXeo/jdcmndZ6muNCqVCk+ePEHdunWL0LEUoa+v7t371bofX+FQqGFGLHu64iIiIiIAK
bnEnwMnJCYGBgYi0jgYA3L59G19//TW2bNmC1NRUWbl//z6++eYbAM9wegc0HIj169dj8+bN0NHRQd++ff+XuDdt2
oR69eohLS1NFu0yZcuwfv16PHnyRON1CxYsw07du3H06FGt7vPw4UN8/vnn8PLyQs2aNV8q5uDgYfy+fBm7d+9Wa1
u8eDGsra3h5+cHAAGNDUVycjL0nj2r1vfJkyfIz8/HkydPsGHDBixevFj2DNLS0mBvb49Nmza9VLxEREREREQVUEf
TyQ4d0oRPPvKEfy5cgCAIaNY4MSZNmoR33nmMu0r1iIiIuDP6YnTp0/jyJEjsLa2Rp8+fdS+E75r165QqVTo2rUr
AGDgwIGYPXs2pkyZguDgYnNBZcUKCgqQnZ0tq9PT000NGjWkz3/++afad3TXr1+/1K3wKpUKvXv3hoeHh6ze3t4eU
VFR2Lt3L3r06KF2XZMmTdCvXz+sXLlS47g3b97Eo0ePc0/ePZw5cwaLFi3C33//LW0h18bDhw/V5qNUKhEchIXt27
ZhWiAB+Pjjj9GxY0fk5eXhs88+w65du7Bt2zbpgX7wwQfYu3cv0nbsiDLz5qBdu3YwNTXF6d0nsXDhQqhUKmRmZuL
u3bsYPHiw7JR+A0jduzDUKhXGjBkj1V26dEktVj3NxxgYGGg9NyIiIiIiorJUaV948a8N8PX1hbGxMcaNG4cxY8bA
yMgIHTt2x0bNmys7xmqrSZMm8PX1xfTp0xEbG4tevXqpJecAEBgYiD179uCvv/4C8CyJ9vX1xd27d9U0hyu2b98+2
Nraykq7du1kft755BM0a9ZMVko7p0/MmTNI50tDYGCGwPupqSnefffdEg+LA4A5c+aUeMq5i4sL6tSpgzfffBMLFi
yAr68vfvnlF2n7vzYyMjLU5jNkyBAIgoDEXERMnTOVS5cuhaurK9555x38/vvv0HjwIHr27CmNoVAo8N1332Hy5ML
Yu3Yt3n77bbRo0QIRVqzAuHHj40HhAZVKBV9fX7XkHHj2s0pNtCvPP/0k1QUHB6vFdePGDa3nRUREREREPA1BrMD3
SjVu3BjDhg3DhAKTZPVLlZBF198odU7wET/dXL5eTA3N4fn2DXQVRi96nD+M8583P9Vh0BEREREVC7FuUFubi7Mz
MxK7FehF0fJFkPpLLHtm2+++U+fXXB4bkipfyUjIiIiIiICKpYr0REYNy4cUhtNUWbNm0qCAK0HDMc+Ph4LYf++vLJ
jpHKYPXs2IiMjNba9yiTxcpfnvf8V50RERERERG9rir0DjoAfPXVV1i8eLH0vnnxKe6aTgAneh1p+54JERERERH9
t2mbG1Q4QSei0vGQUMrDg+GIiIiI6N+sSg+JIYiIiIiIqLKVaF30C0tLSEIglq9IAgWNDSEk5MTwsPDMXDgwJc0k
IiIiIiIi0h1UKEEfr0/2Pvvq0i0to/gH8XFhZhYVGQUERQLiJYU2xJEJSm0VcTEBREaxR1MQW7A2xxECioklciR
FhCyomaSwG40RNIo9RKMQDSgoKArU7w8P++06CyyIJfr9NDPnvDvzzMxzF3P00zv3p2GyMhId07cGalbt4ZSqcT
x48exY8c0jBgXan/++SeGDx+0kpISDB48uLZzJiIiIiIiInrt10gW94MHD2L0nDn44YcfEB4ejLgJRuGHH37AnDlz
c0LECxz//fdYUHAhvvnm9r0l16wmzdVYujQoWjYsCEkEgksLS3h6+uLI0e0AADs7e0REx0j1m/GjBlo2bKloC4vL
w9jxoyBvb099PX1YWVlhYEDB+Lq1auCuJCQEiHeIohEIujp6aF48YYN24cCgsLAQBZWmqdpFIhLp168Ld3R379u
0TjNGjRw+1MefNmyeYKzk5We1uEKVSie+//x7t2rWdiYkJPfIP3NzcMHR0aFy6dKm6XyEREREREZFWarRA37LzJ7y
8vNTQ03XqhJ07dwIAunTpgitXrjxbdvTS+fv7IyMjA4mJibhw4QK2bt0KDW8P50XlVWucvLw8tG3bFrt370ZsbCwu
XbqEpKQkXL58Ge+9957avxU/Pz9kZ2fjypUrmDNnDmJjY9VeH7d7925kZ2dj3759MDExQZcuXfdnn39WmIOBgQHmz
5+P27dvVxijVCrRp08fjBo1Cl26dMGUxbtw6tQpfpPNN6hTpW7mzJLTresmIiIiIiLSVoluca9Xrx62bduGzz77TF
C/bds21KtXDwBQWfGIY2PjZ8+QXpo7d+7g4MGDSEtLQ4c0HQAAdnZ2a26dbXHmjx5Mm7cuIFLly7B0tISANCwYUP
s3LkTjo60GDFiBH7++WdVfNluPQD06dMHqampSE50xrJly1QxZmZmsLS0hKWLJb799ls0aNAaU3btwtChQzXm40XL
hUuXLiEqKgoLFizGQJOUlR169Zhy5Yt+N///qeqb9y4MTp16gS+9ICIiIiIiJ6XGi3Qp06diuHDhYm1NRwt7eGS
CTCsWPH8NPP2H58uUAgF9++Uw1qKP/JqlUcqlUiuTkZLRt2xYSiaRG4zx+/Bjrlq1D3759VYvuMhXq1MGnn36KKV
0mIC8vT/UDz9Pq1KmDR48eVTiHoaEhAFQao6uri7Lz56p2yBs0aKAwS3btWjg70wsW5+Vp0hyxTHFXMYql1iWfCwo
KKowlIiIiIiJ6WolucR88eDD27dsHiYmjbN68GRs3boShoSH27duHsLAWAMDYsWORLJRuq8nSiyUWi5GQkIDEXESY
mpri/fffX6RJk3Dq1CLB3MSJE1WL+bIyd+5cVfwtW7dw584dNGnSR0M8Tzo0gVKprPD57mPHjmhNmjXo1KmTxvbCw
kJERERAV1e3yh+FPv74Y7Rs2RLTp0/X2H7hwgU40zSL6saMGa06Lk2L+jJRUVGQyWSqYmtRw2kuRERERERE5dX4Pe

P1lGDZsGHR37q2xrU4d3mJNRERERET0KqvWAr1Lly6YNm0a0nfurHaS9f379zF9+nR07dq1VhN8FYnF4lfy/dj16t
VDvXr1XnYaREREREREVAPVegb9n3/+wdtVvwlDxV2MHDkSzs70EILeyMzMxNKL51FaWorff/+90tdoEb0peEicEA9
/IyIiIqI3lbbPoFdrB/2tt97C4c0HMXz4cERERKbsS8SieDr64vY2FguzomIiIiIiIhQoFoLd0DjSe4//fQThb++
jUuXLkGpVMLR0RF169Z9HvKRErERERERvRGdYp7eXxR1sV7772H1q1bc3FeA926dY0XL5fGtiNHjkAkEuH333+HS
CRSHUiXLZUFkUikKsbGxnBzc80IESNw8eJFwRgJCmC2LLy9NkBl65dQ1hYGKytraGvrw870zuMHj0aubm5WL+Lh4
eHanyJRAInJyFMnTsXpawLAIC0tDSIRCLcuX0nyrF8fHygq6uLo0ePAGCKi4vh5uaGIU0GqMV0mDABdnZ2KCgo00p
6Q0JCVPVisRgNGzbE80HDcfv2bcG4J0+eRNeuXWfHYQEDAwPY29sjICAA//77r9bfCRERERERUXXVeIF0zyYsLax7
9+7FX3/9pdYWFxeHlilbVnjg2+7du5GdnY2MjAzMnTsXmZmZaNGiBfbs2S0IMzExQXZ2tqCun+/KLSt49913ceHCB
axduxaXLl3C8uXLsWfPhRr1w55eXlaX8/gwY0RnZ2N8+fPY9SoUZgyZQq+/PJLrfsDT15fd+TIEYwcORIKhQIAIJ
FISHLlSiQkJGDHjh2q2KNHjy160hoJCQmqZziqul4A8PPzQ3Z2NrKysrBixQps27YNn376qar95s2b8PLygrm50Xb
u3InMzEzExcXBysoKRUVF1boeIiIiIiKi6qj2Le5U08p2aBMSEjB9+nRVfVFREZKSkjB37twK+5qZmcHS0hIA0Lhx
Y3Tr1g2d0nVCFWgYll++DF1dXQBPzgYoi9NkxIgr0NfXx65du1SvYwvYsCFatWoFBwCHTJ48GcuWLdPqegwNDVvZj
Rw5Elu2bEFycjImTpyoVX8AiI+PR9euXTF8+HC0bt0aMTExMDIywjvvvIPJkydj0KBB+00PP2BgYICBAwdixIgr8P
T0VPWv6nqBJwv+spgGDRogICAACQkjqvbdhw+j0KAAK1asgFj85D+PR0aoWPHjlpfBxERERERUU1wB/0LEYvF6N+
/PxISEld+IP0NGzbG4c0H6Nu3r9Zj6ejoYPT0fjrr79w4sQJrfrk5eVh586d+PTTT9XekW5paYm+ffsIKSkJ1Tjk
X6B0nTp490iR1vFKpRLx8fEIDg6Gi4sLnJycsH79eLX75MmTYWVlpdqdB4CoqKga5VbmypUr2LFjB/T09FR1lpawK
CkpwY8//lJtay8uLkZBQYGgEBERERERAYsL9JcoNDQUWVLZSEtLU9XFxcXhk08+qfZz/S4uLgCePKdeJj8/H1KpVf
B8fHwAABcvXoRSqUSTJk00jtekSRPcvn0bt27dq1YeJx8/xo4d07Bz50506tRJ6367d+9GUVERfH19AQDBwcGq29y
BJz9orFy5Ehs2bMDixYuxcuVKtR8WKrveMikpKZBKpahTpw4cHBxw9uxZwS5/27ZtMwnSJTP0wfm5ubo3LkzFi5c
iH/+afKa4iKioJMLMVWltbra+fiIiIiIiIt7i/RC4uLmjfvj3i4uLg6emJy5cv48CBA9i1ale1xyr/yrsyxsbG+
P333wVxTy9qqzNeZWJjY7FixQo8fPgQANCvXz/BrftVUSgUCAGIUN1WHhQUHPhjx+P8+fNwdnYG80RHA39/f9y5cw
fvvfee2hjaXK+npyeWLVuGoqIirFixAhcuXEB4eLggJjIyEp9//jn27t2Lo0ePYvny5Zg7dy7279+PZs2aVXgNERE
R+Pzzz1WfCwoKuEgnIiIiIiKtCqf9JQsLC80mTZtQUFCA+Ph42NnZVWvnuUxmZiaAJ89L9HR0YfCLhUGXsbAIBc
LodIJMLZs2c1jnfu3DnUrVsX5ubmWs3ft29fpKen4/Lly7h//z4UCgUMDQ216puXl4fk5GTEsZCLBZDLBbDxsYGJ
SULiIuLE8SWtWtS2fWMMTiYglwUR/PmzfHNN9+guLgYM2f0VBvLzMWmVxR1wqJFi5CZmQlra+sqd72TSCQwMTERFC
IiIiIiIm1xgf6S9e7dG7q6ulizZg0SEXmxc0BARXetyzx+/BjffPMNGjVqhFatWmnVx8zMDN7e3oiNjcx9+/cfBtk
50Vi9ejUCAGk0zkUmk0Eul8PW1lZ1Sj22Vq9ejQYNGiAjIwPp6emqEhMTg8TERJSULFRrv0qYPn06vvzyS9y4caPC
GH19fTg40KcwsPC55UFERERERMRb3F8yqVSKgIAATJo0Cfn5+QgJCamyT25uLnJyclBUVIQ//vgDMTEOXHbsGLZv3
y5YHCuVsUtK5Kj1t7CwgI60DpYsWYL27dvD19cXc+bMQaNGjXDmzBmMHZ8eNjY2iIyMrM1LxenTp2FsbCyoa9myJR
QKBXr27ImmTZsK2uzs7DBx4kRs374d3bt3r3L8qq5XEw8PD7i5uWuH3LlYsmQJULJSsG7d0gQGBsLJyQlKpRLbtm3
DTz/9hPj4+GpCLjERERERUfVwgf4KCAAsLg0KhgI+PDxo2bFhVJeXf4Anrzazs70Dp6cnvvuu08jllfKfQUEBRKys
1PpnZ2fD0tISj0e60+0233ZBjxgWEBAQgNzcXlpaw6NGjB6ZPn17he9hryt3dXa3ut99+Q0ZGBR7//nuInmNjY/rj4+
EChUGi1QK/qeivy+eeFY+DAGZ4cSjCXVlZhaGiIsWPH4tq1a5BIJHB0dMSKFSvQr1+/KnMgIiIiIiKqKZGypu/RIq
JKFRQUQCaToUX4cuhKtDuc73V2YmH/L50CEREREDFLUbY2yM/Pr/SsKj6DTkRERERERPQK4C3uVKKDBw6gc+f0Fbb
fu3fvBwbz37R/ThBPdCciIiIioipxgU6Vevfdd5Genv6y0yAiIiIiInrtCYF0lapTp47a4XNERERERERU+7hAJ3r0
3KesfaM0ieNhCERERERENcND4oiIiIiIiIeAvygExEREREREB0CuEAnIiIiIiIiegVwgU4vTEhICEQIEUQIEfT09
PDWW2/B29sbcXFxePz4sVq8j48PdHV1cfToUQBavLaWqn9FZcaMgaq4stPnyz5bWFjg7t27gjlatmyJGTNmC0ouXb
qE0NBQNGzYEBKJBDY2NuJqRNwr16NkpK55/LdEBERERERcYF0L5Sfnx+ys70RLZWFn3/+GZ6enHg9ejS6du0qWPx
evXoVR44cwcIRI6FQKAAAtRa2yM70VpWxY8fCzc1NUDDu3LgK57579y6+/PLLSvM7duwY3n77bWRmZmLp0qX4448/
kJKSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLBgweC+rZt2+LEiRnwdnbGiBEj40rqivbt
22Pt2rWIjo7G80Hda2V+IiIiIiKip4mUfLEz0XNRUFAAmUyGFuHLoSup87LTeWF0L0z/sLMgIiIiInqlK0N8vPzK
z2rire4Ezln++ce8cA4IiIiIiKqEm9xJyIiIiIiInoFcIF0RErERERE9ArgAp2IiIiIiIjofcBn0ImeM/cpal+7Q+
J4EBwRERERUE3jDjORERERERHRK4ALdCiIiIiIiIqJXABfoRERERERERK+AV3aBHhISApFiHGhdhqm1ffrppxCJRAg
JCRHUH58GLq6uvDz81Prk5WVBZFIPcP169aFu7s79u3bp4q5efMmhg4dioYNG0IikcDS0hK+vr44cuRItXKf03cu
dHV1MW/ePLW2hIQEiEQitRzv3LkDKUiEtLQ0VV35fI2Mj0Do6IiQkBCc0HFC61zS0tIgEonQtGLTLJaWcTpMTU2Rk
JCgVf6bNm2Crq4url69qnEeFxcXjBo1CgDg4eGBMWPGCNovXbqE0NBQ1XdrY20DTp06YfXq1SgpKVEbb8iQIdDV1c
W6detUdew/D02l7N+DSCRCcnKyLYuLBR4eHjA2NgYhoaGe0+999SuvezfiIWFBe7evStoa9myJwbMmKHx2omIiIi
IiGrDK7tABwBbw1usW7c09+/fv9U9ePAAa9euRcOGDdXi4+LiEB4ejoMHD1a4kNy9ezeys70xb98+mJiYoEuXLvjz
zz8BAP7+/sjIyEBiYiIuXLiArVu3wsPDA3l5edXK0z4+HhMmTEBCXJzGdrFYjD179iA1NVWrsbKzs3HmzBksXboU9
+7dQ5s2bbBy5cpq5XT58mWt+2jK/3//+x/MzMyQmJioFn/o0CGcP38eYWFhGsc7duwY3n77bWRmZmLp0qX4448/kJ
KSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLBgweC+rZt2+LEiRnwdnbGiBEj40rqivbt
22Pt2rWIjo7G80Hda2V+IiIiIiKip4mUfLEz0XNRUFAAmUyGFuHLoSup87LTeWF0L0z/sLMgIiIiInqlK0N8vPzK
z2rire4Ezln++ce8cA4IiIiIiKqEm9xJyIiIiIiInoFcIF0RErERERE9ArgAp2IiIiIiIjofcBn0ImeM/cpal+7Q+
J4EBwRERERUE3jDjORERERERHRK4ALdCiIiIiIiIqJXABfoRERERERERK+AV3aBHhISApFiHGhdhqm1ffrppxCJRAg
JCRHUH58GLq6uvDz81Prk5WVBZFIPcP169aFu7s79u3bp4q5efMmhg4dioYNG0IikcDS0hK+vr44cuRItXKf03cu
dHV1MW/ePLW2hIQEiEQitRzv3LkDKUiEtLQ0VV35fI2Mj0Do6IiQkBCc0HFC61zS0tIgEonQtGLTLJaWcTpMTU2Rk
JCgVf6bNm2Crq4url69qnEeFxcXjBo1CgDg4eGBMWPGCNovXbqE0NBQ1XdrY20DTp06YfXq1SgpKVEbb8iQIdDV1c
W6detUdew/D02l7N+DSCRCcnKyLYuLBR4eHjA2NgYhoaGe0+999SuvezfiIWFBe7evStoa9myJwbMmKHx2omIiIi
IiGrDK7tABwBbw1usW7c09+/fv9U9ePAAa9euRcOGDdXi4+LiEB4ejoMHD1a4kNy9ezeys70xb98+mJiYoEuXLvjz
zz8BAP7+/sjIyEBiYiIuXLiArVu3wsPDA3l5edXK0z4+HhMmTEBCXJzGdrFYjD179iA1NVWrsbKzs3HmzBksXboU9
+7dQ5s2bbBy5cpq5XT58mWt+2jK/3//+x/MzMyQmJioFn/o0CGcP38eYWFhGsc7duwY3n77bWRmZmLp0qX4448/kJ
KSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLBgweC+rZt2+LEiRnwdnbGiBEj40rqivbt
22Pt2rWIjo7G80Hda2V+IiIiIiKip4mUfLEz0XNRUFAAmUyGFuHLoSup87LTeWF0L0z/sLMgIiIiInqlK0N8vPzK
z2rire4Ezln++ce8cA4IiIiIiKqEm9xJyIiIiIiInoFcIF0RErERERE9ArgAp2IiIiIiIjofcBn0ImeM/cpal+7Q+
J4EBwRERERUE3jDjORERERERHRK4ALdCiIiIiIiIqJXABfoRERERERERK+AV3aBHhISApFiHGhdhqm1ffrppxCJRAg
JCRHUH58GLq6uvDz81Prk5WVBZFIPcP169aFu7s79u3bp4q5efMmhg4dioYNG0IikcDS0hK+vr44cuRItXKf03cu
dHV1MW/ePLW2hIQEiEQitRzv3LkDKUiEtLQ0VV35fI2Mj0Do6IiQkBCc0HFC61zS0tIgEonQtGLTLJaWcTpMTU2Rk
JCgVf6bNm2Crq4url69qnEeFxcXjBo1CgDg4eGBMWPGCNovXbqE0NBQ1XdrY20DTp06YfXq1SgpKVEbb8iQIdDV1c
W6detUdew/D02l7N+DSCRCcnKyLYuLBR4eHjA2NgYhoaGe0+999SuvezfiIWFBe7evStoa9myJwbMmKHx2omIiIi
IiGrDK7tABwBbw1usW7c09+/fv9U9ePAAa9euRcOGDdXi4+LiEB4ejoMHD1a4kNy9ezeys70xb98+mJiYoEuXLvjz
zz8BAP7+/sjIyEBiYiIuXLiArVu3wsPDA3l5edXK0z4+HhMmTEBCXJzGdrFYjD179iA1NVWrsbKzs3HmzBksXboU9
+7dQ5s2bbBy5cpq5XT58mWt+2jK/3//+x/MzMyQmJioFn/o0CGcP38eYWFhGsc7duwY3n77bWRmZmLp0qX4448/kJ
KSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLBgweC+rZt2+LEiRnwdnbGiBEj40rqivbt
22Pt2rWIjo7G80Hda2V+IiIiIiKip4mUfLEz0XNRUFAAmUyGFuHLoSup87LTeWF0L0z/sLMgIiIiInqlK0N8vPzK
z2rire4Ezln++ce8cA4IiIiIiKqEm9xJyIiIiIiInoFcIF0RErERERE9ArgAp2IiIiIiIjofcBn0ImeM/cpal+7Q+
J4EBwRERERUE3jDjORERERERHRK4ALdCiIiIiIiIqJXABfoRERERERERK+AV3aBHhISApFiHGhdhqm1ffrppxCJRAg
JCRHUH58GLq6uvDz81Prk5WVBZFIPcP169aFu7s79u3bp4q5efMmhg4dioYNG0IikcDS0hK+vr44cuRItXKf03cu
dHV1MW/ePLW2hIQEiEQitRzv3LkDKUiEtLQ0VV35fI2Mj0Do6IiQkBCc0HFC61zS0tIgEonQtGLTLJaWcTpMTU2Rk
JCgVf6bNm2Crq4url69qnEeFxcXjBo1CgDg4eGBMWPGCNovXbqE0NBQ1XdrY20DTp06YfXq1SgpKVEbb8iQIdDV1c
W6detUdew/D02l7N+DSCRCcnKyLYuLBR4eHjA2NgYhoaGe0+999SuvezfiIWFBe7evStoa9myJwbMmKHx2omIiIi
IiGrDK7tABwBbw1usW7c09+/fv9U9ePAAa9euRcOGDdXi4+LiEB4ejoMHD1a4kNy9ezeys70xb98+mJiYoEuXLvjz
zz8BAP7+/sjIyEBiYiIuXLiArVu3wsPDA3l5edXK0z4+HhMmTEBCXJzGdrFYjD179iA1NVWrsbKzs3HmzBksXboU9
+7dQ5s2bbBy5cpq5XT58mWt+2jK/3//+x/MzMyQmJioFn/o0CGcP38eYWFhGsc7duwY3n77bWRmZmLp0qX4448/kJ
KSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLBgweC+rZt2+LEiRnwdnbGiBEj40rqivbt
22Pt2rWIjo7G80Hda2V+IiIiIiKip4mUfLEz0XNRUFAAmUyGFuHLoSup87LTeWF0L0z/sLMgIiIiInqlK0N8vPzK
z2rire4Ezln++ce8cA4IiIiIiKqEm9xJyIiIiIiInoFcIF0RErERERE9ArgAp2IiIiIiIjofcBn0ImeM/cpal+7Q+
J4EBwRERERUE3jDjORERERERHRK4ALdCiIiIiIiIqJXABfoRERERERERK+AV3aBHhISApFiHGhdhqm1ffrppxCJRAg
JCRHUH58GLq6uvDz81Prk5WVBZFIPcP169aFu7s79u3bp4q5efMmhg4dioYNG0IikcDS0hK+vr44cuRItXKf03cu
dHV1MW/ePLW2hIQEiEQitRzv3LkDKUiEtLQ0VV35fI2Mj0Do6IiQkBCc0HFC61zS0tIgEonQtGLTLJaWcTpMTU2Rk
JCgVf6bNm2Crq4url69qnEeFxcXjBo1CgDg4eGBMWPGCNovXbqE0NBQ1XdrY20DTp06YfXq1SgpKVEbb8iQIdDV1c
W6detUdew/D02l7N+DSCRCcnKyLYuLBR4eHjA2NgYhoaGe0+999SuvezfiIWFBe7evStoa9myJwbMmKHx2omIiIi
IiGrDK7tABwBbw1usW7c09+/fv9U9ePAAa9euRcOGDdXi4+LiEB4ejoMHD1a4kNy9ezeys70xb98+mJiYoEuXLvjz
zz8BAP7+/sjIyEBiYiIuXLiArVu3wsPDA3l5edXK0z4+HhMmTEBCXJzGdrFYjD179iA1NVWrsbKzs3HmzBksXboU9
+7dQ5s2bbBy5cpq5XT58mWt+2jK/3//+x/MzMyQmJioFn/o0CGcP38eYWFhGsc7duwY3n77bWRmZmLp0qX4448/kJ
KSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLBgweC+rZt2+LEiRnwdnbGiBEj40rqivbt
22Pt2rWIjo7G80Hda2V+IiIiIiKip4mUfLEz0XNRUFAAmUyGFuHLoSup87LTeWF0L0z/sLMgIiIiInqlK0N8vPzK
z2rire4Ezln++ce8cA4IiIiIiKqEm9xJyIiIiIiInoFcIF0RErERERE9ArgAp2IiIiIiIjofcBn0ImeM/cpal+7Q+
J4EBwRERERUE3jDjORERERERHRK4ALdCiIiIiIiIqJXABfoRERERERERK+AV3aBHhISApFiHGhdhqm1ffrppxCJRAg
JCRHUH58GLq6uvDz81Prk5WVBZFIPcP169aFu7s79u3bp4q5efMmhg4dioYNG0IikcDS0hK+vr44cuRItXKf03cu
dHV1MW/ePLW2hIQEiEQitRzv3LkDKUiEtLQ0VV35fI2Mj0Do6IiQkBCc0HFC61zS0tIgEonQtGLTLJaWcTpMTU2Rk
JCgVf6bNm2Crq4url69qnEeFxcXjBo1CgDg4eGBMWPGCNovXbqE0NBQ1XdrY20DTp06YfXq1SgpKVEbb8iQIdDV1c
W6detUdew/D02l7N+DSCRCcnKyLYuLBR4eHjA2NgYhoaGe0+999SuvezfiIWFBe7evStoa9myJwbMmKHx2omIiIi
IiGrDK7tABwBbw1usW7c09+/fv9U9ePAAa9euRcOGDdXi4+LiEB4ejoMHD1a4kNy9ezeys70xb98+mJiYoEuXLvjz
zz8BAP7+/sjIyEBiYiIuXLiArVu3wsPDA3l5edXK0z4+HhMmTEBCXJzGdrFYjD179iA1NVWrsbKzs3HmzBksXboU9
+7dQ5s2bbBy5cpq5XT58mWt+2jK/3//+x/MzMyQmJioFn/o0CGcP38eYWFhGsc7duwY3n77bWRmZmLp0qX4448/kJ
KSgtDQUCxfvhnzppypn5+CiIiIiIjokTzFnV4oiUQCS0tLAICNjQ3efvtttG3bFp06dUJCQgIGDRoEAIiPj0fXr
l0xfPhwtG7dGjExMTAyMLl1BQCpVAqxWCyoA4B///1X49zh4eH46quvMGLECFhYWKi1K5VKhISEwMnJCYcOHYK0zv
//ftWqVsv07dsXSqXymb8DiIiIiIiIiIbDiT9dx44d0aJFC2zevBnAk4VyfHw8go0D4eLiAicnJ6xfv/6Z5wkKCoJ
cLsesWbM0tqenpyMzMxPjxo0TLM7LE4lEFY5fXFYmGoICQSEiIiIiIiIiIwF+j0SnBxcUFWvhYAYPfu3SgqKokVry8A
IDg4WHwb+7MQiUSYN28evvvu01y+fFmt/cKfCWAAZ2dnVd3NmzchlUpVJTY2tsLxo6KiIJPJVMXW1vaZcyYiIiIo
jchF+j0SLaqlardaYVCgYCAAIjFT57ACAokWq+/orz588/8zy+vr744IMPMHXq1Apjyu+Sm5mZIT09Henp6TA1Nc
XDhw8r7BCREYH8/HxVuXbt2jPnS0RErERERbW4u00mVkJmZiUaNGiEvLw/JycmIjY2FWCYGWCYgY0NSkpKEBCXVyt
zzZs3D0LJSTh58qSg3tHREQBW7tw5VZ2uri7kcnkcrnqB44KSCSmJiYCAoREREREG2uECnL27m3r04fF0/P39
sXrlajRo0AAZGRmqnev09HTEqXMQgMTGxVl5z1rplA3zzySf44osvBPWtWRWCi4sLvvyS42vfSMiIiIiInqeeI07v
VDFxcXIyclBaWkp/vnnH+ZysQNRUVHo2rUr+vfvj3feeQc9e/ZE06ZNBf3s70wwceJEbn++Hd27d3/mPCIji+Hm5i
bYFREJRIiPj4e3tzfef/99REREoEmTJnj06BH279+PW7duQVdX95nnJiIiIiIiI0oQ76PRC7dixA1ZWVRc3t4efnx9
SU1PxzTffYMuWLUhPT0dGRgb8/f3V+hkbG8PHx6dWDosDACcnJ4SGhuLB

uHahFilahF9//VXtu/rqq69w8+bNkr/X8oqLi1FQUCAoRERERE2nqLF+gAMHDgQMTXh6s+x8XFITQ0VC0uKSkJz
s70cHZ2RnBwMOLj49UWkk8ZNDQEADx69AhSqRRSQtRTJyckoLi6ucb4KhQJBQUHQ09NDUFCQYAE4vBkZuD06dPYuH
Fjtf47LPPcPfuXfzyyy9a9xkzZgxKSkqWZmSSuMqyz8sLAXrLwRPBZQ9sNIRbvn6enpyMzMxLx46Cjo/mfm0g
kUssh0DgYmpkMXbp0Efz9q2vjxo1490iRxp3yoU0HQiqVYU3atYL6oKAgy0VyzJo1q1pzRUVFQSaTqYqtrW2N8yYi
IiIioj fPK79A79evHw4ePIsrCz89ddf0HToEIKDg9XiyhZ1A0Dn54d79+5hz549FY5bWFiIiIgI60rqok0HDhCLx
UhISEBiYiJMTU3x/vvvY9KkSTh16pTwuRYUGDTPk2qPIKDg7Fx40aNO6nW1tYYPXo0Jk+erPEZ7Mq4uLgAgGpnWR
uGhoaYPn06oqKikJ+fX6P8XV1d0aZNG8GCef369SgtLUVQUJDGMS9cuAAACHZ2VtXdvHLT9Y0IVCpFbGysqu3ixYs
4evQoAgICVDnEx8fj8ePHWL/r0/PLZDJYwVmptenr66N48aqHMuIRCLMmzcP3333HS5fvqz1XBEREcjPz1eVa9eu
1ShnIiIiIiJ6M73yC3Rzc3N89NFHSExMRHx8PD766C0Ym5sLYs6fP49jx44hMDAQWJNnvAMCAjQ+A96+fXtIpVIYG
xtj27ZtSEhIQLNmzQA8eQb9x00b2Lp1K3x9fZGwLoa33367wtvln7ZmZRo0btXydat3y5Yt0bhbX8FBZ+VNnDgRt2
7dqvBZ9YqU3Rnw9M5zVcLCwmBubo758+drbNcm/7CwMGzcuFF1iFpcXBw++eQTmJqaVjp3+VzNzMyQnp609PR0mJq
a4uHDh6o2hUIBX19fld+4S5cuKCwsx07du6t1rdpSKpUav0dfX1988MEHMDp1qtZjSSQSmJiYCAoREREREZG2XvkF
0gCEhoaqdrc13d6uUChQUlICGxsbiMViiMViLFu2DJs3b1Z7TjSpKQkZGRm4desWrl+/rrYbb2BgAG9vb0ybNg2HD
x9GSEgIpk+frlWecXFx0HPmjCoHsViMM2f0VHibu6mpKSiIiJbZ5kwUFRVp+W0AmZmZAIBGjRpp3Qd48sPFnDlz8P
XXX+PGjRs1yj8wMBAikQhJSum4d0kSDh48W0HT70Dg60gIADh37pyqTldXF3K5HHK5HGKxWfVfWlqKlStXYvv27ar
5DQ0NkZeXV+F3WBUNJyfk5+drvN6HDx/iypUrqhyfNm/ePCLJeHkyZM1mpuIiIiIKg6/hMLd8/Pzx8+BAPHZ6E
r6+voK2kpAQRv67EokWLVLuy6enpyMjIgJ2dHVavXi2It7W1hY0DA8zMzLSa29XVFYWFhVXGnT59Gr/99hvS0tIEe
ezfvx/Hjx/HH3/8obFfeHg4dHR0KjyBXJ0yE8y9vLy07L0mV69echNzW8yZM2uUv7GxMXr16oX4+HjExcWhcePG8P
DwqHC+Vq1awcXFBV9++WWvt6n/9NNPuHv3Lk6ePCnIYc0GDUh0TkZubm61r9ff3x9isRiLFi1Sa1u+fDkKCwsrvD2
/devW+OSTT7Q6zI+IiIiIi0hZias0efl0dXVVu8a6urqCtpSUFNy+fRthYWFq3j37NkTCoUCI0e0rHK03Nxc90rV
C6GhoWjevDmMjY3x22+/YcGCBjevXuV/RUKBVq3bg13d3e1tnbt2kGhUCA60lqtzcDAADNnzSIESM0jnvznzh3k5
0SguLgYFy5cwlfffovK5GSsXLmyytkKzJv3jy1Hzqqk39YWBg+/PBDnD17FuPGjav0VnuRSIT4+Hh4e3vj/fffR0
REBj0aYJHjx5h//79uHXrlupvqLa08NFHH6mdBu/m5oYxY8ZglapVGD16dLWutWHDhliwYAHGjRSHAWMD90vXD3p
6etiyZQsmTzQEsWPHok2bNhX2j4yMhJubm2Cnn4iIiIiI6Hn4T+ygA6jwmV6FQgEvLy+Nr9jy9/dHeno6fv/99yrH
l0qlaNOmDaKjo+Hu7o6mTzt16tSpGDx4cJUUnz98+BCrVq2Cv7+/xnZ/f3+sWrVK8Kx1eQMGEDEjxo01tg0c0BBWV
lZwcXHB80HDIZVKcezYmFtp06fKa6pIx44d0bFjR9XhdNXN/4MPPoCzszMKCgowYMcAKudr27YtTpW4AwdnZ4wYMQ
Kurq5o37491q5di+joaAwfPhz//PMPtm/frjEHkUiETz75pMa3uX/22Wf48ccfcedAAbz77rto2rQp1qxZg2XLlX
5vnMnJyeEhoZW+Xo6IiIiIkiZyVSvUuMiKqkYKCAshkMrQIXw5dSZ2XnU6t0rGw/8t0gYiIiIjoP6NsbZCfn1/p
YdK8b5fo0ds/J4gnuhMRERERUZX+M7e4v2yrV68WvLu7fHFzc3tpeXXu3LnCv0b0nfvS8iIiIiIiIqLq4S3uWrp79
y7++ecfjW16enqws7N7rWk9cf36ddy/f19jW7169VCvXr0XnBGV0fY2FiIiIiIier3xFvdaZmxsDGNj45edhhobG5
uXnQIRERERERHVAi7Qiz4z9ylreUgcEREREREFvic+gEXERERERE0CuEAnIiIiIiIiegWvgf4GCGkJgUgkUit+fn4
AAHT7elVdnTlYAg9vj969e2Pv3r2CcdLS0iASiXDNzh210Vq2bIKZM2YI6k6ePIlevXhrbfeGoGBAZyCnDB48GBc
uHBBrb+Pjw90dXVx90HRAEBWVpbGnMuXGTNmQ0LS09MF4yUmJqJ169YwMjKCSbEx3N3dkZKSovF6mjZtitLSUKBq
akpEhIstPh2iYiIiIiIaoYL9DeUn58fsr0zBWxt2rWq9lmzZiE70xvzn5/HypUrYwPqCi8vL0RGRtZovpSUFRLrt2x
bFxcVYvXo1MjMz8cMPP0Amk2Hq1Kmc2KtXr+LkSMY0XikFAoFAMDW1laQ69ixY+Hm5iaoGzdunMa5x40bh6FDh6J
3797IyMjAsWPH80GHH6J79+5YsmSJWvzly5excuXKGL0nERERERFRTfGQuDeURCKBpaVLhe3Gxsaq9oYNG8Ld3R1W
VlaYNm0aevbsCWdnZ63nKioqwsCBA9GL5xf8+00PqvpGjRqhTzS2ajvw8fHx6Nq1K4YPH47WrVsjiYGRKZGgnyLU
inEYrHaNfz777+Cz0ePHSWiRYvwzTffIDw8XFUFGRmJBw8e4PPPP0f37t1ha2uragsPD8f06dMRFBQEAwMDra+TiI
iIiIjoWAXHnbQ2evRoKJVKbNmyPvr9du7ciX//RcTJkzQ2G5qaqr630qlEvHx8Qg0DoaLiwucnJywfV36Gue8du1
aSKVSDb06VK1t7NixePToETZt2iSoHzNmDEpKsjTurlemuLgYBQUFGkJERERERKQtLtDfUckpKZBKpYIye/bsSvvU
q1cPFhYwYMrKqtZcFy9eBAC4uLhUGbt7924UFRXB19cXABACHKy6zb0mLly4AAcHB+jr66u1WvtbQyaTqT0Db2hoi
OnTpyMqKgr5+flazxUVFQWZTKYq5XfliYiIiIiIqSIF+hvK09MT6enpgjJixIgq+ymVSoHEomrNpVQqtY5VKBQICA
iAWPzk6YugoCD8+uuv0H/+fLXmrE5umq4nLCwM5ubmmD9/vtZjRUREID8/X1WuXbtWm6kSEREREdFrjgv0N5SRkRH
kcrmg1KtXr9I+ubm5uHxrFholagQAMDExAQCNU8x37tyBTCYDADg50QEazp07V+n4eXl5SE50RmxsLMRiMcRiMwxs
bFBSUoK4uLhqX2PZ3JcvX8bDhw/V2m7cuIGCggI40jqqTynFYsyZMwdf/01bty4odVcEokEjYmgkJERERERKQtL
tBJa19//TV0dHTQo0cPAICjyN0dHRw/PhxQVx2djaux7+u0k1j0x865ubmWLBggcZxyw6JW1716NR0aICMjAzBzn
5MTAwSEXRNLJ57ZADAwN7949fPvt2ptX375Jf0X0Dv76+xb69eveDm5oaZM2dWe14iIiIiIqL4inub6Hj4yml
k50AQ16sRiMczNZEADw+eRU50Dh49eoQ//wTq1atwoovKxAVFQW5XA7gyUnvQ4c0xdixYyEWi9GIRQvcu6HedjyP
RpMmTeDj4wPgyW79ihUr0KtXL/zvf//DqFGjIJfL8e+//2L9+vW4evUq1q1bB4VCgZ49e6Jp06aCv0zs7DBx4kRs3
74d3bt3r9Z1tmvXDqNHj8b48ePx80FD90jRA48ePcKqVavw9ddfIyYmptJnxefNm6d6Hp6iIiIiI0h54g76G2rHjh
2wsrISLA8++EDVPm3ANfHwUeUL6Nfv37Iz8/Hnj17MHHiRME40dHRGDRoECZNmgQ3Nzf07dsXjRo1wq5du1TPKQN
A9+7dcfjwYejp6aFPnz5wcXFBUAQ8vPzMWf0HJw4cQIZGRkad70NjY3h4+NT48PiYmJiEbsbi3Xr1qfZs2Z45513
sG/fPiQnJwtevaZJx44d0bFjxxrt3hMREREREVWHSfmdE7yISGsFBQWQyWRoEb4cupI6LzudWnViYf+XnQIRERER0
X9G2dogPz+/0r0quINORERERERE9ArgM+hEz9n+0UE80Z2iIiIiIKrEXHXQiIiIiIkiVwAX6ERERERERESvAN7iTv
ScuU9Z+587JI6HwBERERERvXjcQSciIiIiIiI6BXCbTKRERERERPQK4AKdiIiIiIiI6BXABfoLFBISApfIpfB8/Pw
AAPb29hCJRdh69Kig35gxY+Dh4SGIqahUFTdv3jwAQFZWlqBeJp0hbdU22LZtGwDAW80j0nns7e1V+c2d0xe6urqq
sctLSEiAqamp4HP5ay5z584diEQipKwLqerK5nr6+yguLoaZmVmF8U+XdevWAQDS0tIgEonQtGLTLJawCsY0NTVFQ
kKCKqaykpCQoP7HJSiIiIiIiekY8J04F8/PzQ3x8vKB0IpGo/reBgQEmTpyIffv2aex//Phx1eLy80HD8Pf3x/nz51
Xv2dbX11fFzpo1C4MHDxb0NzY2FnzevXs33Nzcc0f0HcTGxsLf3x+//47Nm/ejIcPhWiArL27htatW6tiAUBXV1c
1Rnx8PCZMmIC4uDH88cUXVX4HYrEYe/bsQwpqKjw9PSuNtbW1RXx8PNq2bauq+/HHHyGVSpGL6cWHx8fr7b4L/8D
AQBcvnwZK1eumCBA9X6t2/fHtnZ2arPo0ePRKFBgeBvJpJKs2ZiIiIiIioJrid/oJJBJYwLokSt26dVXtQ4c0x
dGjR/HTTz9P7f+/fn1Vv3r16gEALCws10qAJ4vxp+cyMjISjGdmZgZLS0u4uLggMjISjx49QmpKurVq6fqU79+fU
Fs+bp9+/bh/v37mDVrFg0LC7f//4qvwMjIyMMHDhQq8X8gAEDsG7d0ty/f19VFxcXhWEDmIMNzU1VbtmAwMDQUx
4eDimT5+0Bw8eqPXX19cX9K1Tp47a36x0nf/WiEXERERERPTfWAX6K8be3h7Dhg1DREQEhJ9+/MLmffToEb7//nsA
gJ6entb9FAoFgoKCoKenh6CgICgUCq36zGxA6dPn8bGjRsRjXvnnXfQqFEjbNq0CcCT3fz9+/ejX79+Wuf4tDFjx
qCkpARLliyp8RiaFBcXo6CgQFCiIiIiIi0xQX6C5aSkGKpVCoos2fPFsRMmTiff/75J1avXv1Mc02cOFFtrvLPbA
NPbumWSqUwMDDA2LFjYW9vj969e2s1fkFBATZt2oTg4GAAQHBMZu3KjVwtTa2hqjR4/G5MmTUVJSUmnsWIEDERc

XB+DJLexdunRR7eA/LSgoS02ar1y5IogxNDTE90nTERUVhfz8fG0uVStRUVGQyWSqYmt rW2tjExERERHR648L9BfM
09MT6enpgjJixAhBTP369TFu3DhMmzZN9Rx4TYwFP15trjZt2ghikpKScPLkSwzduhVyuRwrVqwQ3CZfmTVr1qBx4
8Zo0aIFAKBly5Zo3Lix6LC2qkyc0BG3bt1SLb4rEhwcjCNHjuDKLStISEhAaGhohbHR0dFq16xpoRwWFGZzc3PMnz
9fq1y1ERERgfz8fW5du1arY1NRERERESvPx4S94IZGRlBLpdXGff5558jNjYwsbGxNZ7L3Ny8yr1sbw3h60gIR0d
HSKVS+Pv74+zZs7CwsKhy/Li40Jw5cwZi8f//M3r8+DEUCgWGBDL5ZX9TU1NERERg5syZ6Nq1a4VxZmZm6Nq1K8LC
wvDgwQN07twZd+/e1RhraWmp1fcrFosxZ84chISEY0TIkVXGa0MikQg0/CMiIiIiIqo07qC/oqRSKaZ0nYrIyMgX9
ixzhw4d0LRpU0RGRlyZe/r0afz2229IS0sT7Fbv378fx48fxx9//KHVn0Hh4dDR0cHXX39daVxoaCjS0tLQv39/wQ
nyz6JXr15wc3PDzJkza2U8IiIiIkiZ8Ed9BesuLgY0Tk5gjqxWAXzc3012CFDhiA60hpr165VuzVdG3fv3Lwby9D
QUPVKnk3Gjh2LXr16YcKECbCxsakwTqFQoHXR1nB3d1dra9euHRQKBaKjo6vM0cDAADNnzLS7zf9pfn5+uHXRvQw5
A0/ep/70NRsbG6udXL9m3rx58PX1rTJPIiIiIki54076C/Yjh07YGVlJSgffPCBxlg9PT3Mnj1b4+vAtDFt2jS1u
SZMmFBpn65du8Le3r7SXFShDX9ilapV8Pf319ju7++PVatWaf38/IABA9C4ceNKY0QiEczNzQXveddk4MCBate8eP
HiCuM7duyIjh07VnlQHRErERER0fMmUiqVypedBNHrqKcGADKZDC3Cl0NX8t96d/qJhf1fdgpERERERK+NsrVBfn5
+pXcF8xZ3ouds/5ygKm/NjYiIiIi4i3uRERERERERERK8ALtCJiIiIiIIXgFcoBMRERERERER9AvgM0tFz5j5l7X/i
kDgeDEERERE9HJxB52IiIiIiJofcAF0hEREREREdErgAt0IiIiIiIiIo1cAF+g1FBISApFIpFYuXboEALh27RrCw
sJgbW0NFx192NnZYfTo0cjNzVub68yZM+jduzf168PiUQCR0dHTJ06FUVFRIY4e3t71Tx16tSBvb09evfujb1799
boGnx8fKCrq4ujR49Weh3z5s0T1CcnJ0MkEqk+p6WlqXLS0dGBTCZDq1atMGHCBGRnZ2udy4wZM1TjiMvMjubw93
dHTExMSguLhbEenh4qGL19fXh40CAiIgItTiRSITk5GTBZWMda/z11+CuB49eiAkJERw7T169BDEbNy4EQYGBLiW
YIHW10RERERERFQdXKA/Az8/P2RnZwtK0a0Nc0XKFbz77ru4c0EC1q5di0uXLMh58uXys2cP2rVrh7y8PNUYR48eR
Zs2bFdW4UNS374dFy5cwNy5c5GYmAhvb288fPhQM0esWb0QnZ2N8+fPY+XKLTA1NYWXLxciIyOrlfvVq1dx5MgRjB
w5EgqFQm0MgYEB5s+fj9u3b1c53vzn53Hjxg0cP34cEyd0x07du9G0aV0cPn1a65zc3NyQnZ2Nq1evIjU1Fb169UJ
UVBTat2+Pu3fvCmIHDx6M70xsXLP0CQsWLMDSUsxY8aMKucQiUSYNm2a1jkBwIoVK9C3b18sWbIEEyZmqFZfiIi
IiIibXGB/gwkEgksLS0FRVdXFyNgJIC+v527dqFDh06oGHDhujcuTN2796N69evY/LkyQAAPVKJsLawNGnSBJS3b
0br1q1hZ2eHXr16Ydu2bThy5Aio6MFCxobG8PS0hINGzaEu7s7vvvu00yd0hXTpk3D+fPntc49Pj4eXbt2xfDhw5
GULITCwkK1GC8vL1haWiIqKqrK8SwsLGBpaQknJycEBgi0KFDqF+/PoYPH651TmKxGJaWlRc2tkazZs0QHh60ffv
24Y8//sD8+fMFsYaGhqrwd/fH97e3t1a1eVc4SHh2PVqlVa/3CwYMECjBw5EmvWrMGgQYMQjS0uLkZBQYGgEBER
ERERaYsL9FqWl5eHnTt34tNPP0Wd0sJXa1laWqJv375ISkqCUqlEeno6zp49i88//xw60sI/RYSwLEdL5YW1a9dW0
efo0a0hVCqxZcsWrXJUKPWIj49HcHAwXfxc40TkHPXr16vF6erqYu7cuVi8eDH+/vtvrcYuU6d0HQwbNgyHDh3CzZ
s3q9W3PBCXF3Tu3BmbN2+uMCYjIw0HDh2Cnp5e1e01b98eXbt2RURERJwX3zxWbWpno2ULBT4+/tXGR8VFQWZTKY
qtra2VfYhIiIiIiIqwwX6M0hJSYFUKLWVXr164eLFilAqlWjSpInGPK2aNMht27dx69YtXLhwQVVXUwXZTGXqlasH
CwsLZGVlaZX37t27UVRUBF9fXwBACHBwhbe5f/zxx2jZsiWmT5+u1djlubi4AIDWeVU2ztNjxMbGQiqVQiKRoGXLl
rh16xbGjx+v1XhRUVHYsWMHDhw4UGHMzz//jPnz52PLL13w8vLSatyIiAjK5+eryrVr17TqR0RERERERHCBK/ad8PT
2Rnp60Kf298802fYRZKJQADlqRfLfabu0rGKhQKBAQCwAwCCgoLw66+/VniL/Pz585GymIizZ89qNX75nadtrrw
qcZ4eo2/fvkhPT8eRI0fQ3dvhIaGarXLDQCurq7o378/Jk6cWGFm8+bNYW9vj2nTpk9/14RiUQCExMTQSEiIiI
ItIWF+jPwMjICHK5XFwsrKwgl8shEokqXMye03c0devWhbm50ZycnACg0lhHR8cq88jNzcwtW7fQqFGjKmpz8vKQn
JyM2NhYiMViiMViiNjYoKSKBHFxcRr7uLu7w9fXf5MmTapy/PIyMzMBPDL9/llkZmaqXZtMJoNcLsfbb7+NVatWYd
++fRXeBaDjZJkzcfLkScEp7+XZ2Nhg3759yM70hp+fn9aLdCiIiIiIiopriAr2WmZmZwdvbG7Gxsbh//76gLSnB6t
Xr0ZAQABEIHfFatmwJfxcXRedH4/Hjx4LYjIwM7N69G0FBQVX0+fXXX0NHR0ft1WCarF69Gg0aNEBGRoZg9z8mJgaJ
iYkoKSnR2G/evHnYtm0bDh8+X0UcAHD//n189913cHd3R/369bXqo8m5c+ewY8e0SnfH9fT0MGnSJeyZMKxt1XQVs
bW1xciriZfP0iSulPZqjGnYsCH27duHmzdvwfHh4e+ERERERHRC8UF+n0wZMkSFBcXw9fXF/v378e1a9ewY8c0eH
t7w8bGRvVKNJFIhBURVuDs2bPw9/fHsWPHcPXqVwZysAHdunVDu3btMGbMGMHYd+/eRU50Dq5du4b9+/djyJAhmDN
nDiIjIyGXy6vMTaFQoGfPnmjatKmgHiaG4s6d09i+fbvGfs2aNUPfVn2xePFije03b95ETk40Ll68iHXr1uH999/H
v//+i2XLlmn9vZWULCAnJwc3btzA6d0nsXjxYnTo0AETw7as8vnyPn36QCQSITY2Vuv5IiIic0PGDezevbnvCmAYNG
iAtLQ25ubnw8fFBfn6+luMTERERERFVBxfz4GjoyN+++030Dg4ICAgAA40DhgyZag8PT1x5MgR1KtXTxX7/vvv4+
jRo9DV1UWXLl0gl8sRERGBAQMG4JdfFoFEIHGMPW3aNNwt9P369UN+fj727NLT6fPUZU6c0IGMjAyNu9HGxsbw8fG
p9Dbx2bNnq54rf5qzsZ0sra3xzjvvYN68efDy8sIff/wBV1fXKvMqc+bMGVhZwaFhw4bw8PDA+vXrERERgQMHDkAq
lVbaV19fHyNHjsSCBQtW7949rearV68eJk6ciACPhLQaV3a7+507d+Dt7Y07d+5oe0LERERERERAEykrWner0TMpK
CiATCZDi/Dl0JXUqbrDS3ZiYf+XnQIRERER0WupbG2Qn59f6WHS4heY9EbaF+cIJ7oTKREREREVEit7q+ZYc0GCD
7NXr4MGzbspeVVUu5SqbT595ETERERER9KXiL+2vm5s2bFZ42bmJiAgsLixec0R0XLl2qsM3GxgZ16rz6t4BX17a
3sRARERER0euNt7i/oSwsLF7aIrwy2pwwT0RERERE9CbJAp3oX0fsvaLHhLHw9+IiIiIiP4b+Aw6ERERERER0SuA
C3QiIiIiIiKiV8AbsUA/fPgwdHV14efnJ6hPS0uDSCTCnTt31Pq0bNkSM2bMUMVUVhISEgAaPaWliI60RvPmzWfGy
ABTU1N07twZhw4dqn09+/fR926dVgVxJ3cv39frd3e3h4ikQhHjx4V1I8ZMwYeHh6qzzNmzFDlKRAlYW5uDnd3d8
TExKC4uFirXJo1a4ZBgwZpbFu7di309PTwzz//VPpd5eTkqPJp2bKl2jhZWVkiURIT0/X+LnMpk2b40HhAZLMBql
UiubNm2PwrFnIy8sDACQKJMDU1LTcawkJCdGYX/L/GydPnkTXrl1hYWEBawMD2NvbIyAgAP/++69W3xcREREREVFN
vBEL9Li40ISHh+PgWY04evVqtFq2b98e2dnZqtK7d2/4+fKJ6GICAqBUKhEYGIhZs2Zh1KhRyMzMxL59+2BrawsPD
w8kJydXa95Nmzahad0mcHV1xebNmzXGGBgYY0LEiVW05ebmhuzsbFy9ehWpqano1asXoqKi0L59e9y9e7fK/mFhYV
i/fj2KiorU2uLi4tC1a1e89dZbqrrz588Lvp/s70xa0bhu8uTJCAgIwHvvvYeff/4Zf/zxBxYtWoSMjAz88MMPWo/
z9N8v0zsba9euBfDkFHwvLy+Ym5tj586dyMzMRfxcHKysrDRPeXERERERUW157Q+JKywsxPr163H8+HHk500gISEB
06ZN07q/vr4+LC0tVZ/r1KmD4uJiQR0AJCULyEPgJdi6dSu6deumqv/uu++Qm5uLQYMGwdvbG0ZGRlRnq1AoEBwCD
KVSCYVCgb59+6rFDB06FMuWLCNPP/2ELL26VDiWwCw5WttbY1mzZrB29sbLVq0wPz58zFnpzxKc+nXrx8mTpyIDR
s2YMCaAar6qlevYu/evdiyZysg3sLCotJd7Jo4duwY5s6di5iYGIwePVpVb29vD29vb413QVREIpGo/f3KHD58GAU
FBVixYgE4if/eTRq1Agd03Z8pvyJiIiIiIiq8trvoCclJcHZ2Rn0zs4IDg5GfHw8nser39esWQMnJyFb4rzM2LFj
kZubi19++UWrs55fowjR46gd+/e6N27Nw4fPowrV66oxdn22PYsG0REIiJa48ePq5Wvi4sL0nfU0HuHfHlMzmo3
r074uPjBfXx8f466230LlZ52rNXR0rV6+GVCrF5p9+qrg9tn4QsLSGRELJCX788cdq/zsPLi5GUGUBoBAREREREW
nrtV+gl+1EA09ubb537x727NLT6/NcuHABTzo00dhWVn/hwgWtxoqLi0Pnzp1Vz6D7+fkhLi50Y+yUKVPw559/YvX
q1dX02cXFBVLZWVrFhoaGYv//aofCpRKJRiSEhASEgJdXV1BbIMGDSCVSLXF2dLZ0H769GLBu1QqhZubW6XzX7x4
EY0bN4aenp72F1iBLJQUtflnz54NAGjbtioMTZqEPn36wNzcHJ07d8bChQvxzz//VDluVFQUZDKZqtja2j5zrkRER
ERE90Z4rRfo58+fx7FjxxAYGAjgya3eAQEBFS52nzeRSFrlTGLpKRITE1U/KgBACHAwEhMTUVpaqhZfv359jBs3Dt

OmTcPDhw+rLY9SqdQqJwDw8fFBgwYVNLvof/fuRVZWfGyY0HKgWe+DAAaSnP6vKzp07Be30zs6C9vT0dPz000+1lmt
VPD091eYfMWKEqj0yMhI50TLyVnw5XF1dsXz5cri4u0D06d0VjhsREYH8/HxVuXbtWq3kS0REREREB4bX+h10hUKB
kpIS2NjYq0QUSiX09PRw+/ZtmJiYAADy8/PVbpG+c+c0ZDKZ1nM50Tnh7NmzGtsyMzMBAI60jLw0s3PnTly/fh0BA
QGC+tLSUuzatUvj7eSff/45YmNjERSbq3W+ZXk1atRIq1gdHR2EhIQgISEBM2f0RHx8PNzd3TveU6NGjSq95VxfXx
9yuVxQV/a8d0WcnJxw80BBPhr06Jl30Y2MjNTmf5qZmRl69eqL0LcVatW+PLLL5GYmFhhH4LEAoLE8ky5ERERERH
Rm+u13UEvKSnBypUrsWjRISFOaUZGBuzs7LB69Wo40jpCR0cHx48fF/TNzs7G9evX1W7NrkxgYCAuXryIbdu2qbUt
WrQIZmZm8Pb2rnIchUKBwMBAT3evn370QfQa0wjlUoxdepUREZGav3c87Lz57Bjxw74+/trFQ8AAwc0XN9//43Nm
zdj8+bNCAsL07rvs+rTpW/u3btX4Y8Q1Tkkrrr09fXh40CAwsLC5zYHERERERHRA7uDnpKSgtu3byMsLExtJ7xnz5
5QKBQY0XIkhhg4dirFjx0IsFqNFixa4ceMGJk+ejCZNmsDHx0fr+QIDA1WnnC9cuBCD0nVCQUEBli5diqlbt2LDhg1
VnuB+69YtbNu2DVu3bkXTpk0fBQMGDMBH32EW7duoX79+mp9hwwZgujoaKxduxZt2rQRtJWULCAnJwePHz9Gbm4u
0tLSMGf0HLRs2RLjx4/X+hrLTjMfMmQI9PT00LNNt41xN2/exIMHDwR1ZmZmz7Tz3aZNG0yYMAFjx47F9evX8fHHH
8Pa2hqXLl3C8uXL8cEHH6h0dy8tLVV7f7q+vj5cXV0BPDnMrey97GXX3hGfKpKCdevWITAwEE50TLAqldi2bRt++u
kntUPyiIiIiIatNru0BXKBtW8vLSeJu6v78/5s6di99//x3R0dGwsrLCpEmTkJWVBQsLC3h6emLdunVV3nZdnkg
kwvr16/H1118j0joaI0aMgEQiQbt27ZCamooPPvigyJFwrlWJIYmJd0rUSa3N09MTxsBG+OGHH/D555+rtevp6WH2
7Nno06ePwtuZM2dgZUWFXVldyGQyuLq6IiIiAs0HD6/2LdlhYWHYs2cPhgwZAKNDQ40xmu480HLKCNq2bVutuZ42f
/58vPP001i6dCmWL1+0x48f6HBAT179hS8/u3evXtolaqVoK+dnZ3qQLwd03bAyspKLedz587B1dUvhoagGdt2LK
5duwaJRAJHR0esWLEC/fr1e6b8iYiIiIiKiNSP093jhERCgoKIJPJ0CJ80XQLdV5aHicW9n9pcxMRERER0f+vDfL
z81VnoWny2j6DTkrERERERPRf8tre4v6qcnNzw19//aWx7dtvv0Xfvn1fcEZXoum6XT4Mvf3uXub2bx+9s8JqvRX
MiIiIiIiIoAL9Bfup59+wqNHjzS2vfXWwy84myfeffddtUPViIiIiIiI6MXiAv0Fs70ze9kpqKLTp06V7wUnIiIiI
iKi54sLdKLnzH3KwH4SR0REREREVeIhcURERERERESvAC7QiYiIiIiIiF4BXKATERERERERvQK4QCetLF++HmBgxi
gpKVHV3bt3D3p6evjwww8FsQc0HIBIJMKFCxdgb28PkUikVubNm6c2h4+PD3R1dXH06FEAQFZWlsa+5cuMGTNUcZp
0ovfw8MCMYMMEnzWNM2zYMFVM+XqpVioLVogISHh2b5AiIiIiIiKiKvCQ0NKKp6cn7t27h99++w1t27YF8GQhbmLp
iePHj60oqAiGhoYAgLS0NFhbW8PJyQkAMGvLAWePFgwnrGxseDzlatXceTIEYwcORIKhQJt27aFra0tsr0zVTFff
vkludzYgd27d6vqpFip/v3332pdy+DBgzFr1ixBXVnuZeLj4+Hn54fCwkIkJSVh4MCBsLKygq+vb7XmIiIiIiIi0h
Z30Ekrzs70sLa2RLpamqouLS0N3bt3h40DAw4fPiyo9/T0VH02NjaGpaWloBgZGQnGj4+PR9euXTF8+HAKJSWhsLA
Qurq6gj5SqRRisVitrroMDQ3V8jExMRHEmJqawtLSEg40Dpg0aRLq1auHXbt2VXsuIiIiIiIibXGBTLrz8PBAamq
6nNqai08PDzQoUMHVf3Dhw9x5MgRwQK9KkqLEvHx8Qg0DoaLiwucnJywfV36Ws+/JkpLS7F+/Xrk5eVBT0+v0tj4
mIUFBQICHERERERkba4QCeteXh44NChQygpKcHdu3dx8uRJuLu700HDqqd9aNHj+L+/fuCBfrEiRMhLuoFpfx0/0
7du1FUVKS6fTw40BgKhaLa+bVv315tngMHDqjFxcbGqsULJiYKY0KCGiCVSiGRSBAQEIB69eph0KBBLC4fFRUFmUy
mKra2ttW+BiIiIiIienPxGXTsmgenJwoLC3H8+HHcnv0bTk50sLCwQIC0HdCvXz8UFhYiLS0NDRs2R0PGjVX9xo8f
j5CQEMFYnjY2qv+TUCGQEBAAfjJP8egoCCMHZ8e58+f70zs9b5JSULoUmTJoK6vn37qsX17dsXkydPftrZWfGIP
kdHR8PLYwvXrL2D559/jS8++wxuyubzS+SMiIvD555+rPhcUFHCRtREREREWuCNbQml8vRoEEDpKam4vbt2+jQoQ
MAwNLSEo0aNCkhQ4eQmpqKjh07CvqZm5tXuLjNy8tDcnIyHj16hGXLLqnqS0tLERcXh/nz52udn62trd08derUUYu
TyWRVLrYtLS0hl8shl8uxYcMGtGrVCu+++y5cXV0r7C0RSCCRSLT0L4iIiIiIqDze4k7V4unpibS0NKS1pcHDw0NV
36FDB+zcuRNHjx6tlvPnqlevRoMGDZCRkYH09HRViYmJQWJiouC1bi+LXC6Hv78/IiIiXnYqRERERET0GuM00LWlp
6cnRowYgUePHqL20IEnC/Thw4fjwYMHagv0u3fvIicnR1BnaGgIExMTKBQK90zZE02bNhW029nZYeLEidi+ftU6d+
9eq9dQVFSklo9EIKhdunUr7DN27Fi0aNECv/32G959991azYeIiIiIiIajgDjpV6kenJ+7fvw+5XI633nplVd+hQwf
cvXsXDg40as9dT5s2DVZWVoIyYcIEnDhxAhkZGfD391ebx9jYGD4+PjU6LK4q33//vVo+QUFBLfZp1qwZvLy8MG3a
tFrPh4iIiIiICABESqVS+bKTIHodFRQUQCaToUX4cuhK1J+Ff1F0L0z/0uYmIiIiIqL/Xxvk5+fDxMSkwjje4k70n
02fE1Tpf4REREREREQAb3EnIiIiIiIieiVwgU5ERERERET0CuACnYiIiIiIi0gVwGfQiz4z9ylrX+ghcTwUjoiIiI
jov4k76ERERERERESvAC7QiYiIiIiIiF4BXKATERERERERvQJeiwV6SEgIevToobHN3t4eMTExgs8ikQgikQ16urq
wtrZGWFgYbt++rYpJS0tTxYhEipZmaFjx444d0iQxjmGDBkCXV1drFu3Tq1txowZqnF0dHRgbW2Nvn374tqla4I4
Dw8PjBkzRvC5fA5LZdiwYaqY1NRUEhp6ol69ejA0NISjoyMGDBiAkpISLb61/+fs7Ax9fX1cv35dra0sj6evLSYmB
vb29qrPCQkJgu+1bt26aN0mDWBnMmoX8/HytckwJCVGNo6enh7feegve3t6Ii4vD48ePBbHL/5bly7x58wAAWVLZEI
LEEIvFateWnZ0NsVgMKUiErKwsQvtiYiJat24NIYmJGBsbw93dH5KpKVpfAxERERERUU28Fgv06polaxays7N9ep
VrF69gfv238eouAPU4s6fP4/s7GykpaWhfv36+0ij3Dz5k1BTFFREZKSjB+/HgoFAqN87m5uSE70xt///03kpKS
cPr0AffTu3bvKPAcPhozs7GtBWBgAQDgzJkz6NtY5977z3s378fp0+fxuLFi6Gnp6e2kK3WYMH8DBA/Tq13JC
QkaYwwMDDbLYK8evSo0rFXMTEU13n48GGM2IEK1eRMuWLXHjxg2tc/Lz80N2djaysrLw888/w9PTE6NHqj0bXrL
3Vfnwo+luWL+Hh4YIYa2trrFy5ULCXmJgIGxsbtbnHjRuHoU0Honfv3sjIyMCxY8fw4Ycfonv37liyZInW10BERER
ERFRdb+QC3djYGJawLrCxSvYgNpyf69++P33//XS30wsIClpawNasGaZmMYL8/Hz8+uuvpgpNGzbA1dUVERER0HTo
kNpuLACIXWJYWLrC2toah374IQYPHoyJR4+ioKCg0jwNDQ1haWkpKCYmJgCAX375BVZWVliwYAGaNm0KBwCH+Pn5Y
cWKFdDX19f6u1AoF0jTpW/69euHuLg4KJVktZigoCDk5+fj+++r3QskUGES0tLWFLZoUmTJggLC8Phw4dx7949TJ
gwQeucJBKJ6u/z9ttvY9KkSdiYQZt+/vLntR8Ryv6W5YurKZEgZsCAAYiPjxfUJSQkYMCAAYK600ePYtGiRvi4cCH
GjRsHuVy0Jk2aIDiYEmPGjMHnn3+ududDecXfSgokBAUIiIiIiIibb2RC/Tyrl+/jpSUFLRp06bCmKKiItUCT09P
T9CmUCGQHBWmUyGLL26qC0En5aTk4PNmzdDV1cXurq6Nc7b0tIS2dnZ2L9/f43HuHv3LjZs2IDg4GB4e3ujsLAQa
WlpanEmJiaYNGkSZs2ahcLCwmrNYWFhgb59+2Lr1q0oLS2tca4d03ZEixYtsHnz5mr3/d///ofbt2/j4MGDAJ7CNZ
CXl4du3boJ4tauXQupVIqh04eqjTF27Fg8evQImzZtqnCeqKgoyGQyVbG1ta12rkRERERE90Z6Ixf0Eyd0hFQqRZ0
6ddCgQQ0IRCJ89dvXanENGjSAVCqFVCpFdH0Q3nnnHXTq1EnVfvHiRRw9ehQBAQEAg0DgYMTXh6vdYn769GLIpVIY
GhrCysoKaWlpGDFihNp079NiY2NV85eVxMREAEcvXr0QFBSEdH06wMrKCh9//DGWLF1SrV3bdevWwdHREW5ubtDV1
UVgYGCFt+l/+umnMDAw0Pg9VcXfXQV3795Fbm5utfs+Pc7TdyiU/S3Ll6d/ZNDT00NwcDDi4uIAAHFxcQg0Dlb7se
XChQtwcHDQeAeCtbU1ZDIZLly4UGF+ERERyM/PV5XKdtuJiIiIiIie9kYu0MePH4/09HSc0nUKE/bsAQB89NFHaju
8Bw4cw0+//461a9fCzs40CQkGjgKwDQqG8vz63NAQ0BdunRBYEhdu/eLRjH2dkZ6enp0H780CIjI9GyZuTERKZW
mWffvn2Rnp4uKB9//DEAQfDXf/Hx8fj777+xYMECWFtbiZyIyUvW8uzbKdv/LBACHY/PmzbhZ545arEQiwxZs7Bw4
UL8+++Wo1fpuy2eZFIvK1+msZ5eoyyv2X5ouluLcWmGzYsAE50TnYsGEDQkNDa2X+8iQSCUxMTASFiIiIiIhIW2
/kAt3c3BxyuRy0jo7o2LEjYmJicPjwYaSmpgriGjVqBCcnJwQEBGDMzJn4+00PUVxcDAAoLS3FypUrsX37dojFYoj
FYhgaGiIvL09tF1pfXx9yuRxubm6YNGkSWrZsieHDh1eZp0wmglwuF5SnF302Njbo168fli5dirNnz+LBgwdYvnx5
LW0fPXsWv/76KyZMmKDKv23btrh//z7Wrl2rsU9wcDDs7e0xZ86cKscvLzMzEyYmJjAzM6tWP03jNGrUSFBX9rcsX

+rUqaPwt2nTpnBxcUFQUBCaNGmCpk2bqsU40Tnh8uXLePjwoVrbjRs3UBFQAEHx2e6BiIiIiIiooq8kQv0p5U9C3
7//v0KY/r164fhJx8jNjYwAPDTTz/h7t270HnypGD3ds0GDUh0Tq70du6pU6di7dq1Gg+mexZ169aFLZWVVs+JKxQ
KuLu7IyMjQ5D/hAkTKrzNXUdHB1FRUVi2bJnGw/A0uXnzJtasWYMePXPpAR6fm/9z27t2L06dPw9/fv8ZjhIaGIi0t
rcLd88DAQNy7dw/ffvutWtuXX34JPT29Z5qfiIiIiIioMuKXnUBtyc/PR3p6uqCuXr16GmPv3r2LnJwcKJVKXLt2D
RMmTIC5uTnat29f4fg60joYM2YM5syZg6FDh0KhU0Cjjz5CixYtBHFubm4YM2YVq1ahdGjR2scq3HjxujevTumTZ
tW6fu1i4qKkJOTI6iTSCSoW7cuvv32W9U7w40DnJw4AFwrlYJM2f0YPHixRW0CQCPHj3CDz/8gFmzZqntJA8aNAg
LFixARkaG2rUBTx4FaNoMDb799lu89dZbgjalUqn6Xu/cuYmJR45g7ty5kMlkqneTa604uBg50TkoLS3FP//8gx07
diAqKgpdu3ZF//79BbFlf8vyDA0NNd5ePnjyWPTq1QumpqYa523Xrh1Gjx6N8ePH4+HDh+jRowcePXqEVatW4euvv
0ZMTAwPfiMiIiIiIoufmdtLBt0tLQ6tWrQRl2rRpGm0nTZsGKysrWftbo2vXrjAyMsIvv/xS5S3YoaGhePToERYvXo
zt27dr3E0ViUT45JNPktyFLjN27Fhs375d7bVt5X3//fewsRISlKCGIABA69atce/ePQwbNgxubm7o0KEDjh49iUT
kZHT00KHSubdu3Yrc3FzV8+zL0To6olmzZpXmP3/+fDx48ECtvqCgAFZWVrCxsUG7du3w7bfffYsCAATH58iSsrKwq
zam8HTt2wMrKCvb29vDz80Nqaiq++eYbbNmyRe3k+7K/ZflS0SvdxGIxzM3NIRZX/LtUTEwMYmNjsw7d0jRr1gzvV
PM09u3bh+TkZLX3qxMREREREdUmkVLTi6+J6JkVFBRAJp0hRfhy6ERUn4t/Xk4s7F91EBERERERvTBlaP8/PxKD5
N+bW5xJ3pV7Z8TxBPdiYiIiIioSq/NLe4k1LlZ7X3g5eVuXpnpvScrl69WmFOUqkUV69efSl5ERERERERvQq4g/6
aWrFiRYWn0ld0eN7zZmltrXaQ39PtREREREREbyou0F9TnjY2LzSFNWkXGHK5/GWnQURERERE9EriAp3o0X0fsvaF
HRLHA+KIiIiIiP67+Aw6EREREREMSuAC3QiIiIiKiVwAX6FUICQLBjx4910rT0tIgEolw584dAEBpaSmio6PRv
HlzGBgYwNTUFJ07d8ahQ4cE/WbMIGWLvuqjXfnzh2IRCKkpaWp6jZt2oQ2bdpAJpPB2NgYbm5uGDt2rKo9ISEBIp
FIrRgYGFTTrGg8fPgxdXV34+fmptWVLZUEkEsHCwgJ3794VtLVs2RIzZsxQffbw8FDLIJFIYGNjg27dumHz5s3Vyk
kEiE50VmtXtPf4tqlawgLC40ltTX09fVhZ2eH0aNHIZc3VxBXltu8efPUxu3SpQtEILGF11K+DBs2rFrXQkRERERE
pC0u0GuBUqLEYGAgZs2ahVGjRiEzMXp79u2Dra0tPDw8NC42q7J7924EBgaiZ8+e0HbsGE6c0IHIEyEg8fPhQEGdiY
oLs7GxB+euvv6o1VlxcHMLDw3Hw4MEKX3V29+5dfPnll1W0NXjwYGRnZ+PSPuVYtGkTXF1dERgYiCFDhLQrJ21cuX
IF7777Li5cuIC1a9fi0qVLWL580fbs2YN27dohLy9PEG9ra4v4+HhB3Y0bN7B3715YwVLVeC3ly4IFC2r90oiIiIi
IiAAeElcr1q9fj40bN2Lr1q3o1q2bqv67775Dbm4uBg0aBG9vbxgZGWk9ZkpKcJ744A0MHZ9eVefk5KS2gywSiWBp
aVnj3AsLC7F+/XocP34c0TK5SEhIwLRp09TiwsPD8dVXX2HEiBGwsLCocDxDQ0NVPra2tmjbt1lXfWQGHqK3r17w
8vLq8a5Pm3EiBHQ19fHr127UKf0k0PYGjZsiFatWsHBwGTJ0/GsmXLVPFdu3bF+vXrcejQIbz//vsAntyF40Pjo/
GHifLXQkRERERE9LxxB70WrFmzBk50ToLFeZmxY8ciNzcXv/zyS7XGtLS0xJkzZ/DHH3/UVpoaJSUldwnZGc70zgg
ODkZ8fDyUSqVaXFBQEORy0WbNmLXt0QYMGC6detw+1b3yuTL5WHnzp349NNPVYvzMPawlujbtY+SkpIE16Kvr4++
ffsKdtETehIQGhpaKzKVFxejoKBAUIiIiIiIiLTfBboWUljSIJVKBAvZ586q9gsXLqBJkyYa+5bVX7hwoVpzhoeh4
7333k0zZslgb2+PwMBAXMXFobi4WBCXn5+vlpupj4/w8ygUCgQHBwMA/Pz8c0/ePezZs0ctrz57e+++w6XL1+u1r
Xo60jAyckJWVLZWvcJCgpSu67Vq1er2i9evAilULnp93779m3cunVLUB8Wfob169eJsLAQ+/fvR35+Pj766CONy8T
GxqrLkjiYWGHOUVFRKMLkqmJra6v19RIREREREfEwdy14enoKbpUgGF9//VW1sNWGSCSIpxGRkYvN07Ll++jNTU
VBw9ehRjx47F119/jSNHjsDQ0BAAYGxsjN9//1309+kdY5qcP38ex44dU+1si8ViBACEIC4Tu0tL6+vvjggw8wd
epUrFmzpLrXo1Qqq/UdREDHq+UwceJELJaWaj0foP69N2/eHI60jti4cSNSU1PRr18/60npaRyjb9+++mD5x5qCust
v7IyIi8Pnnn6s+FxQUcJFORERERERa4wJdC0ZGRpDL5YK6v//+w/W/nZyccPbsWY19MzMzAQCOjo4AnhZqlp+frxZ
Xdhq8TCYT1Ds40MDBwQGBg3C5MmT4eTkhKSkJAwc0BDAk93pp3PTlKKhQELJCWxsbfR1SquSenp6uH37NurWravW
Z968eWjXrp3g2fiqlJaw4uLfi3jvvfe07mNpaal2XcbGxqrvSS6XQyQS4ezZsxpP2T937hzq1q0Lc3NztbbQ0FAsX
boUZ8+exbFjxyrMQSaTVeu7lUgkKegKwscTERERERGVx1vca0FgYCAuXryIbdu2qbUtWrQIZmZm8Pb2BgC4uLjg77
//Rk50jiDu+PHjVS627e3tYWhoiMLCwmf0uaSkBctXrsSiRYuQnp6uKhkZGBcZsxPcTL5e69at8cknn+CLL77Qeq7
ExETcvn0b/v7+z5x3mbLvNDY2Fvfv3xe05eTkYPXq1QgICNC4a9+nTx+cPn0aTZs2haura63LRERERERE9Cy4g14L
AgMDsWHDBgwYMAALFy5Ep06dUFBQgKVL12Lr1q3YsGGD6gR3Hx8fNGnSBIGBgYiMjIS1tTVOnTqFcePGYdiwYTA2N
gbw5H3pRUVF6NKlC+zs7HDnzh188803ePTokWqxZzz8X56sQ88uRVbR6fi319SULJw+/ZthIWFqe3a9+zZEWqFAi
NHjtTYNzIyEm5ubhCL1f/5FBUVIScnByULJbh+/To2b96M60hoDB8+HJ6enLV/mdWwZMkStG/fHr6+vpzgZw4aNWq
EM2f0YPz48bCxsUFKZKTGfnXr1kV2dnaFt7Y/fS3LSSQsJxcWEBERERERPSvuoNcCkUiE9evXY/LkyYi0joaLiws+
/PBD/PXXX0hNTRXcgi0Wi7Frly40btwYffv2hZubG7744gsMGjQIX331LSquQ4c0uHLLCvr37w8XFxd07twZ0Tk52
LVrF5ydnVVxBQUfSLKyUis3b96sNGeFQgEvLy+1xTka+Pv7Iz09Xe3Z9jJ0Tk4IDQ3FgwcP1Nq+//57WFLZwCHBAR
9//DH0nj2LpKQkXmBgVvU1VpujoyN+++030Dg4ICAgAA40DhgyZAg8PT1x5MgR1KtXr8K+pqamVb72rumaypegoKD
avgwiIiIiIiIiAgEip6U1aRPTMCGokIJP3AJC80XQ12h3c96x0L0z/QuYhIiIiIiIiLta0N8vPzYWjUmEcd9CJiIiI
iIiIXgF8Bv01dfXq10ePQD79iwaNmz4PjN6Yu7cuZg7d67Gtg8//BA//zzC87o+ds/J6jSX8MiIiIiIiIgAiL+2
iopKUFVWlaF7fb29hoPeXve8vLykJeXp7GtTp06gle+/ddpexsLEREREREG93rRdG3AH/TULFotr/H7056levXqVht
5GRERERET0puICneg5c5+ylofEERERERFRlXhIHEREREREdErgAt0IiIiIiIiIolcAF+HERERERERwAu0GvZ4c0
HoaurCz8/P0F9VLYWRCKRqshkMrRt2xbbtm0DAHh4eAjany729vZa57BmzRro6upi2LBham1paWkQiuRo2rQpSkTL
BW2mpqZISEhQfba3t1fNX6d0Hdj26N3797Yu3ev1rk8fd3GxsZwc3PDiBEjCPhIRUFsQkKXms3MdBQxdy8ERNdh
w5Fw4YNIzFIYGLpCV9fXxw5ckSQd0xMjGdskydPIiAgAFZWVpBIJLCzs0PXrl2xbds2LL3IoCXcXwSL3L17V9C/Zc
uWmDFjhtbXTUREREREVf1coNeyuLg4hIeH4+DBg7h69apa++7du5GdnY1ff/0VrVu3hr+/P/744w9s3rwZ2dnZyM7
0xrFjxwSx2dnZOH78eLVymDBhAtatW4eioiKNMZcvX8bKLSurHGVrFnIzs7G+fPnsXLlSpiamsLLyuRkZFa5wP8
/7VkJZGRg7ty5yMzMRISWLBbnzx5BnImJieqay8pff/2lavf390dGRgYSEXN4cIFbN26FR4eHhW+ug0AtmzZgrZt2
+LevXtITEzE2bNnsWHDBvTo0QNTpkxBfn6+IP7u3bv48ssvq3V9REREREREz4qnuNeiwsJCrF+/HsePH0d0Tg4SEh
Iwbdo0QYyZmRksLS1haWmJyMhILF68GKmpqQgPD1fFPHjwQBBbHVLZWTh8+DA2bdqE1NRUBNy4Ef37q5/SHR4ejun
TpyMoKEiwQ/00Y2NjVQ4NGzaEu7s7rkysMG3aNPTs2RP0zs5a5VX+Who3boxu3bqhU6d0CAsLw+XLl6GrqwsAEIIE
FV7znTt3cPDgQaSLpaFDhw4AAdS707Ru3brCeQsLCxEWFOaPPvoImzdVtU70DigdevWGDROkGoHvUx4eDi++uorj
BgxAhYWFldHxERERER0bPiDnotSkpKgr0zM5ydnRECHiZ4+HilxV+ZR48e4fvvVwCA60np1Vo0cXfX+0ijjyCTyR
acHAYfQqExbysYMSGpKCGSJUuqPcfo0a0hVCqjZcuUqepo60D0ANH46+//sKJEye06i0VSIGVSPGcnIzi4mKt+uz
atQu5ubmYMGfChTEiUjw0SgoCHK5HLNmzdqjjlFxcUoKCGfCIIiIiIm1xgV6LFAoFgoDQABb+fn64d++e2i3c
7du3h1QqhYGBAca0Hat6rrs2PH78GAKJCaocAgMDceTIEVy6dEkt1tDQEN0nT0dUVJTALd5VqVevHiwsLJCvLfvM+
bq4uACAYJz8/HzVQrys+Pj4AADEYjESEhKQmJgIU1NTvP++5g0aRJ0nTpV4RwXLlWAAmF0//HjxwXjp6SkCPqIRC
LMmzcP3333HS5fvqz19URFRUEmk6mKra2t1n2JiIiIiIiI4QK8L58+fx7FjxxAYGAjgyWiYICAAcXfXgrikpCSPHK
SW7duhVwux4oVK1CvXr1ayWHXrL0oLCx586dAQDm5ubw8fFRy6FMWFgYzMNMX+/GrPpVQq1XaeazIGINzBNjY2

Rnp6uqDEx8er2v39/XHjxgls3boVvr6+SEtLw9tvvy043K4qzZs3V41dWFiIkPIStrHfX1988MEHmDp1qtbjRkREI
D8/X1WuXbumdV8iIiIiIiI+g15LFAoFskPKYGNjo6pTKpXQ09PD7du3VXW2trZwdHSEo6MjPFIp/P39cfbs2Vp51j
kuLg55eXkwNDRU1T1+/BgnT57E7NmzVc95lxGLxZgzZw5CQkIwcuRIrefJzc3FrVu30KhRo2fKNzMzEwAE4+j06EA
ul1faz8DAAN7e3vD29sa0adMwaNagTJ8+HSEhIWqxj060AJ78gNK2bVsAgEQiqXIOAJg3bx7atWuH8ePhA3U9EokE
EolEq1giIiIiIqKncQe9FpSULGDlypVYtGiRY0c3IyMDdnZ2WL16tcZ+HTp0QN0mTat9Iromubm52LJLC9atW6e2A
33v3j38/PPPGvv16tULbm5umDlzpTzZff3119DR0UGPHj1qn0/jx4/xzTffoFGjRmjVqLWNxwEAV1dXFBYwamzz8f
FBvXr1anSXQ0vWrfHJJ5/giy++eKb8iIiIiIiItME9FqQkPC27dvIywsDDKZTNDWs2dPKBQKd03aVWPfsWPHole
vXpgwYYJg9726fvjhB5iZmaFXr17Q0RH+7tK1a9dKc5g3bx58fX01tt29exc50TL490gR/vzzT6xatQorVqxAVFSU
VrvQZXJzc5GtK40ioil88ccfiImJwbFjx7B9+3bBzr5SqUR0To5afwsLC9y+fRu9evVCaGgomjdvdMnjY/z2229Ys
GABunfvrnFeqVSKFStWICAgAB999BFGjRoFR0dH3Lt3Dzt27AAATsLyouMjISbmxxvEYv6nQkREREREZxd30GuBQq
GA15eX2uIcePLMdHp6eoXv6e7atSvs7e2feRc9Li40H3/8sdrivCyHLJQU/PPPPxr7duzYER07dtT4LPa0adNgZWU
FuVy0fv36IT8/H3v27MHEiR0rLz+XlxesrKzQrFkzfPHFF2jSpAl0nTOFT09PQVxBQQGsRkZuys2bNyGVStGmTrtE
R0fD3d0dTzS2xdSpUzF480BKT6P/+00PcfjwYRgaGqJ//5wdnZGx44dsXfvXqxbt67Chy4AwMnJCaGhoapX3xERE
RERET0vImVF7weJomdSUFaAmUyGfUHL0Sup80LmPLFQ/Z33RERERET0cpWtDfLz82FiYLJhH0/bJXr09s8JqvQ/Qi
IiIiIiIoC3uP9nHDhwQ03940XLyzJs2LAKcxo2bNhLy4uIiIiIiIoI/hre4/0fcv38f169fr7C90ge2laabN2+ioKB
AY5uJiUmtvD7uv0rb21iIiIiI0j1xlvcXzN16tr5aYvwyhYWLzRi3AiIiIiIqLawGU60XPmPmXtczskjofCBER
ERG9PvgM0HEREREREdErgAt0iIiIiIiIoLCaf+j030Xk5CA8PByNGzeGRCKBra0tunXrhj179qhiDh8+jC5duqBu3
bowMDBAs2bNsGjRiPSWlgrGeolEEiLE0Hr0qKC+uLgYZmZmEiLESEtLE8QnJycLYLNTU9GLSxeYmZnB0NAQrq6uGD
t2r0AQvm+//RYtWrSAKZERTE1N0apVK8yfP7/2vhQIiIiIqKncIF0z1VWVhbeecD7N27FwsWLMdp06exY8c0eHp
6YsSIEQCAH3/8ER06dECDBg2QmpqKc+f0YfTo0YiMjErgYCCeftGAra0t4uPjBXU//vijVq+b+/bbb+H15QVLS0ts
2rQJZ8+exfLLy5Gfn49FixYBABQKBT7//HOMGjUKGRkZ0HToECZMmIB79+7V0rdCRERERESkj9Zo+eqS5cu0HXqF
M6fPw8jIyNB2507d6Cnpwc70zt06NABmzZtErRv27YN//vf/7Bu3ToEBAQAeLIjPmXKFHzzzTfIyclBnTpPDL/z8f
FB27ZtMXv2bKSmpsLDw0MV/+OPP6JHjx74+++4eDggE8//RTR0dFud65cwempqbo0aMH6tatq/YjQHWVvUqhrfh
yHhJHRERERPQGO/Y1a9xBp+cmLy8P03bswIgrI9QW5wBgamqKXbt2ITc3F+PGjVNr79atG5ycnLB27VpB/TvvvING
jRqpFvTXrL3D/v370a9fv0r22bBhAx4+fIgJEyZobDc1NQUAWFpa4ujRo/jrr7+0uUyV4uJiFBQUCAoREREREZG2u
ECn5+bSpUtQKpVwcXGPM0bChQsAgCZNMmhsd3FxUcWUN3DgQMTFxQEA4uPj0aVLF9SvX7/SfC5evAgTEXYWV1VGj
d9+nSYmprC3t4ezs70CAKJwfr16/H48eNK+0VFRUEmk6mKra1tpfFERERERETlcYF0z03Z0xMikUjRWE3lmoVHBwf
jyJEjuHLLChISEhAaGqrVHNrkYmVlhSNHjuD06dMYNWoUHj16hAEDBsDPz6/SRXperATy8/NV5dq1a1XORURERERE
VIYLDHpuHB0dIRKJkjmZWGMk5MTAFQYc+7c0Tg60qrVm5mZoWvXrggLC80DBw/QuXPnKvNxcnJCfn4+sr0ztcq/a
d0mGDFiBFavXo1ffvkFv/zyC/bt2ldhvEQigYmJiaAQERERERFPiwt0em7qlasHX19fLF26FIWFhWrtD+7cgY+PD+
rVq6c6Qb28rVu34uLFiwgKctI4fmhokNLS0tC/f3/o6upWmU/Pnj2hr6+PBQsWaGy/c+d0hX1dXV0BQON1EBERERE
R1Qbxy06AXm+xsBf479WcrdujVmzZqF58+YoKSnbL7/8gmXLLiEzMXpffvstAgMDMTIEIwC0ImJibYs2cPxo8f
j549e6J3794ax/bz880tW7e03qm2tbVfDHQ0Ro4ciYKCAvTv3x/29vb4+++sXLLSkilUixatAjDhw+Htbu210nbsi
AYNGiA70xtz5sxB/fr10a5du9r8eoiIiIiIiFS4g07PVaNGjfd777/D09MTY8e0Rd0mTeHt7Y09e/Zg2bJLAJ7sbK
empuLatWtwd3eHs7MzvvrqK0yePBnr1q2r8LlXkUgEc3Nz60vra53Pp59+il27duH69ev4+00P4eLigkGDBsHExER
lkryXlxe0Hj2KXr16wcnJCf7+/jAwMMCePXtgZmb27F8KERERERGRBnwP0tFzwvegExERERERwPegExEREREREf2n
8Bl0ouds/5wgnuhORERERERV4g46ERERERER0SuAC30iIiIiIiKiVwAX6ERERERERESvAD6DTvScuU9ZW+unuPP0d
iIiIiKiLw930ImIiIiIiIeAVygExEREREREB0CuEB/g4WEhEAKeKekEKFPTw+NGzfGuHHjUFhYqIoZMmQIdHV1sW
7d0rX+M2bMUPXX0dGBtbU1+vbti2vXrgniPDw8VHHly7Bhw1QxIpEIBgYG+0uvvwR9e/TogZCQEFVMZaV8XHJycrX
GLp0Tk4PR00dDLpfDwMAAb731Fj744AMsX74cRUVF2n61RERERERE1cYF+hv0z88P2dnZuHLLCubMmYPY2FiMGzc0
AFBUVISkPcSMHz8eCoVCY383NzdkZ2fj77//RLJSEK6fPo3evXurxQ0ePBjZ2dmCsmDBAKGMSCTCtGnTKsy1fN+Ym
BiYmJgI6r7++usK+1Y1NgBcuXIFrVq1lwq5duzB37lycPHkSu3fvxmefFYzt27Zh9+7dlfYnIiIiIiJ6fjwk7g0nKU
hgaWkJA0jTpw9SU10RnJyMZcuWYc0GDXB1dUVERASsrKyQLZUFe3t7QX+xWkzqb21tjcgDB2PUqFEoKCiAiYmJKs7
Q0FAVV5Hw8HAsWrQI48aNQ7NmzdTay/eXyWQQiURVjnt2ADw6aefQiWw47fffo0RkZGqvlmzZvD394dSqdRqLiIi
IiIioprGdJoJ1KLtB48ePQIAKBQKBACHQyaToUuXLoiPj6+0b050DjZv3gxdXV3o6upWe+727duja9euiIiIqFHuz
zJ2bm4udu3ahREjRggW5+WJRKJK5yguLkZBQYGgEBERERERVsLdFI5duwY1qxZg06d0uHixYs4evQoAgICAADBwc
Gj4/H48ePBX10n4NqQZKQNDWFLZIS0tTeMiN9Y2FLKpRFASeXPvcoiKisK0HTtw4MCBw+++ysa+d0KsLEoLnJ2
dBfXm5uaqfCdOnFjL+DKZTFVsbW1rNX8iIiIiInq9CYH+hktJSYFUKoWBgQHatWsHd3d3LF68GAQfAr6+vJ3ANwCA
d0nSBYWFhWrPYTs70yM9PR3Hjx9HZGQKWrZsicjISLV5+vbti/T0dEH5+00P1eJcXV3Rv3//KhfDNahN2E/vkh87d
gzp6elwc3NDcXFxpNHREqGpZ9fVZ4+LI+IiIiIiKgyfAb9Defp6Ylly5ZBT08P1tbW0NPTQ2lpKVauXImcnByIxf
//T6S0tBQKhQI+Pj6qOn19fcjlcgBPDoy7ePEihg8fjh9++EEwj0wmU8VVZebMmXBychKcxF5bKhpblpdDJBh3Ll
zgvrGjRsDeHLrflUkEgkEkmt5UpEREREREG8w7qC/4YyMjCCXy2FnZwc9PT0AwE8//YS7d+/i5MmTgh3vDRs2IDk5
Gbm5uRWON3XqVKxduxa///57jX0ytbXfYJEjMwnSJJswltZ4n0qMbWZmBm9vbyxZskTwmjkiIiIiIqIXhQt0UqNQK
PDRRx+hRYSwaNq0qar4+/ujfv36WLvqVYV9Gzduj07du6u90qyoqAg50TmCcvv27QrHiYiIwI0bN57Lq80qGjs2Nh
YLJSV49913kZSUHmZMTJw/fx6rVq3CuXPnanTwHRERERERkba4QCeBf/75B9u3b4e/v79am0gkwieffFLh09HLjB0
7Ftu3b8evv/6qqvv+++9hZWULKEFBQRW0Ua9ePUyc0BEPHjyo+cVUC2wHBwecPHkSXL5eiIiIqISWLfDuu+9i8eLF
GDduHGbnPn3ruRAREREREZURKflyZ6LnoqCgADKZDC3CL0NXUvUz7NVxYmH/Wh2PiIiIiIien7K1QX5+PkxMTCqM4
w46ERERERER0SuAp7gTPWf75wRV+isZERERERERwB10IiIiIiIoLCf+hERERERERERwDe4k70nLlPWvtrh8TxcD
giIiIiIotcXd9CjIiIiIiIXGfCoBMREREREREG9ArhAJyIiIiIiInoFcIF0z1VISAhEIPa6dixI8zNzTFnzhyN/aK
iomBubo6HDx8iISFB4xgBgBzQ88ybN08wTnJyMkQiUaw5LC8ACPPmTQwd0hQNGzaERCKBpaULfH19ceTikef0LRER
EREREXGBTi+An58fsr0zBWXtpk0IDg5GQkICLeqlwP/4+Hj069cP+vr6AAATEx01Mf766y9BHwMDA8yfPx+3b9/Wm
MfXX38t6f82z9N1/v7+yMjIQGjiIi5cuIctw7fCw8MDExL5tfm1EBERERERCfAud3ruynahnxYwfoavv/4a+/fvR4
c0HVT1Bw4cwMWLFxWfFaqE4LEgsc0z8vLC5cuXUJUVBQWLFig1i6TySCTyQR1pqamgnHv3LmDmGpPi0tTZWtnZ0
dWrdurd3FEHERERER1RB300mLadasGd577z3Ex8cL6uPi4tC6dWs0bdq0WuPp6upi7ty5WLx4Mf7+++8a5SSVSIGV
SpGcnIzi4uJq9S0uLkZBQYGgEBERERERaYsLdHruUJLSVAvfsjJ79mwaQGHokDZu3Ih79+4BA07du4cNGzyYds8BI
D8/X20MHx8ftbk+/vhjtGzZEtOnT69RrmKxGAKJCUHMTISpqSnef/99TJo0Cad0naqyb1RUlGqXXiaTwdBwtKY5EB
ERERHRm4kLdHruPD09kZ6eLigjRowAAAQFBEx48dISkoCACQLJUGpVCIWMAwhrGxsdoYT++8l5k/fz4SEXN9uz

ZGuXr7++PGzduY0vWrfD19UvWAhrefvttJCQkVNovIiIC+fn5qnLt2rUazU9EREREREG8mPoN0z52RkRHkcrnGNpLM
hp49eyI+Ph5hYWGIj49Hz549YWJiIoJt0dGpcIynubu7w9fXF5MmTUJISEiNcjYwMIC3tze8vb0xbdo0DBo0CNOnt
690PILEAoLEuQp5iIiIiIuINOL1lYWBgOHTqELJQUHDp0S0329pqYN28etm3bhs0HD9dChoCrqysKCwtrZSwiIi
IiIiJNuIN0z1lxcTFycnIEdWKxG0bm5gCADh06QC6Xo3///pDL5XB3d1cbQ6LUqo0BABYWFtDRUf+dqVmzZujbty8
WL15crVxzc3PRqlcvhIaGonnz5jA2NsZvv/2GBQsWoHv37tUai4iIiIiIqDq4QKfnbse0HbCysHlUOTs749y5c6rP
oaGhmDRpEsaPH69xjIKCARUxACA707vC16/Nnj0b69evr1auUqkUbdq0QXR0NC5fvoxHjx7B1tYWgwcPxqRJK6o1F
hERERERUXWILEql8mUnQfQ6KigogEwmQ4vw5dCV1KmVMU8s7F8r4xARERER0YtTtjbIz89X02+rP06gEzln++cEVf
ofIRERERERECBD4oiIiIiIiIeCVygExEREREREb0CuEAnIiIiIiIiegXwGXS58x9ytpaR9q1KgAAE4dJREFUOSS
0B8QREEREReb3euINORERERERE9ArgAp2IiIiIiIJoFCAF0j1XISEhEILEqmJmZgY/Pz+cOnVKFV0+vXxZt26d2nj0
zs7Q19fH9evX1drs7e0REX0jVh8TEwN7e3tVTEXziUQING3aFJaWlpG7d67a0L1798Z7772HkpKSmn8hEREREREF
eACnZ47Pz8/ZGdnIzs7G3v27IFYLEbXrL0FMfHx8aqYstKjR4//a+/eg6I67z+0fxa5SnGNKK7ES7CSYgTRotVWKL
5SaxIll0kab0jrdFqvKZgxmKY2jbkgZhKjIwpxmHTMpWRsiJPoFIkPeQ0XGC6KwdukJiaphNRwVxHl+f2R8TQrqGh
2l5Xf+ZXDjPs833P20R9Wli9nz9GpZvfU3Tp37pweeugh/fWvf72htRQVFVn7f+eddyRJR48etcY++ugjZWZ6ummn
n1Z5ebm13d///ne9//772rRpk3x9uXUDAAAAANej04DbBQOEy0FwSJICdodSU1M1duxYff311+rVq5ckqXv37lbnL
WRLZWnGjBlKSEjQggUL9Ic//EE2m+261nLp+SSpR48ekqSwsDB1797dGk9MTNSMGTM0e/ZsFRYWqqamRvPnz1daWp
oGDx58Xc8HAAAAA01Fgw6Pamho0JttvqlBgwYpNDS03dvV19dr8+bN2r9/v6KiotY2Kid03dq/PjxblnnmjVrFBM
To2eeeUaHDx9WdHS0Fi9eFNVtmpqa1NTUZD2uq6tzy9oAAAAAE406HC7rVu36gc/+IEkqbGxUX369NHWrvV14/0/
KyymT5+uLL260G1380BBDRW4UJkUnZ2tyMhIDRkyRJI0bdo0ZWVLua1B79atm1577TVNmjRJwchB0njw4DXP1qeLp
enpp592y3oAAAAAdH406HC78ePHa/369ZKkb775RuvWrdNdd92lwsJCDRgwQJK0evVq3XnnnU7b9evXz/pzVlaWZs
2aZT2eNwuWxo4dq5qaGqePp7vShAkTNHr0aA0bNsxa59U88cQTwrJkiFw4rq706RgAAAAA4Gpo00F2wchBGjRokPU
4Li50drtdGzdu1LPPPivp22vTv1vzXRUVFdq/f7+KioQumppqjV+8eFF/+9vfNG/ePenfvWura1ttX1NTY3sdvsN
rd3X17fdN4ULCAHQEDADT0PAAAAANCgw+NsnPt8fHx09uzZdtVnZWp7NixevXV53GX3/9dWVLZVKNelRULIqKi
lptX1RUpB/96Efff+AAAAA4EY06HC7pqYmVZWSpKq6uVkJGhhoYGTZ06laqqamxai4JCQmRv7+/Xn/9da1ysU
LR0dF087/97W+1atUqHThwQLGxsVqyZInGjBmjFstW6MEHH5QkvfP008rNzdWePXvcfJQAAAAA8P3QoMPtcnNzlad
PH0nfNt1RUVHavHmzx0bZ9X85je/abVdWlqaIimjdfr0ad1///2t5iMjIxUTE60srCytXbtWo0ePVL5enlasWKGX
X35ZkjRkyBD15eVp1KhRbjk2AAAAAHAVmzHGdPQigM6orq50drtdsYs2qEtA0PfeX/ELs12wKgAAAAACedqk3qK2tV
bdu3a5Y53PFGQAAAAA4DF8xB1ws4+enX7V35IBAAAGESDDrjNpatH6urq0ngLAAAAADrSpZ7gwleY06ADbnL69G
lJU9r+/Tp4JQAAAAAC8QX19vex2+xNadABN+nRo4ck6eTJk1f9S4jvr66uTv369dPnn3/05QQeQN6eRd6eRd6eRd6
eQ9aeRd6edTPkbYxRfX29wsPDr1PhGw64iY/Pt/dgtNvtXvuDorPp1q0bWxsQeXsWeXsWeXsWeXsOWXsWeXuWt+fd
npN23MUDAAAAAAAvQIM0AAAAAIAxoEEH3CQgIEBPPfWUAGICOnopnR5ZexZ5exZ5exZ5exZ5ew5ZexZ5e1Znyttmr
nWfdwAAAAAAAHacYQcAAAAAAvQoAMAAAAAA4Vo0AEEAAAAA8AI06AAAAAAAEAdMAN1qlbp4iICAUGBiouLk67du
3q6CXddNLS0jRy5EiFhIQLCwM9913n44ePepUY4zRn//8Z4WHhysoKEjx03Txx9/7FTT1NSKrysWqwfPng0DLZ
iYqK++0ILTx7KTSktLU02m00pKSNGHm71pdfqLZs2YpNDRUXbt21bBhw1RcXGzNk7drXLhwQX/84x8VERGHoKAg
DRw4UCtWrFBLs4tVQ9Y37qOPPtlUqVMVHh4um82mLVu20M27Ktvq6moLJSXJbrfLbrcrKSLJNTU1bj467301vJubm
5WamqqYmBgFBwcrPDxcS2fP1n/+8x+nfZB3+13r9f1dv//972Wz2fTyyy87jZN3+7Un780HDysxMVf2u10hISEaPX
q0Tp48ac13hrxp0AEXe/vtt5WSkqInn3xSpaWl+vnPf6677rrL6YcHrq2goEALFizQvn37lJ+fRwsXLmjSpElqbGy
0alatWqWXXnpJGRkZKioqksPh0C9+8QvV19dbNSkpKXr33XeVnZ2t3bt3q6GhQV0mTNHFic74rBuCkVFRcrMzNTQ
oU0dxsnbdaqrqzVmzBj5+fnpH//4hyoqKvTiyy+qe/fuVg15u0Z6ero2bNigjIwMHT58WktWrdILL7ygV155xaoh6
xvX2Nio2NhYZWRktDnvqmxnzJihsrIy5ebmKjC3V2VLZUpKSnL78Xmbq+V95swZLZSUaPny5SopKVf0To60HTumxM
REpzrybr9rvb4v2bJli/bv36/w8PBWc+TdtftK+5NPPLf8fLyioqK0c+d0HThwQMuXL1dgYKBV0ynyNgBc6ic/+Ym
Z03eu01hUVJRZtmxZB62oc6iqqjKSTEFBgTHGmJaWfuNw0MzKlSutmnPnzhm73W42bNhgjDGmpqbG+Pn5mezsbKvm
yy+/ND4+PiY3N9ezB3CTqK+vN5GRkSY/P98kJCSYxYsXG2PI29VSU1NNfHz8FefJ23XuueceM2f0HKExBx54wMya
csYQ9auJMm8++671mNXZVtRUWEkmX379lk1e/fuNZLMkSNH3HxU3uvvyNtSWFhoJJnPPvVMGEPe38eV8v7iyy/Mrb
feag4d0mQGBhgVq9ebc2R941rK++HH37Y+tndls6SN2fQARc6f/68iouLNWnSJKfxSZMmac+ePR20qs6htrZWktS
jRw9J0okTJ1RZWemUDUBAgBISEqysiuLldzc7FQTHh6u60hovh9XsGDBAt1zzz268847ncbJ27Xee+89jRgxQg89
9JDCwsI0cPhwbdy40Zonb9eJj4/Xhx9+qGPHjkmSDhw40Pn27d+uuu+WRNbu5Kps9+7dK7vdrLgJrLk10ePltluJ
/9rqK2t1c1msz296u1dLSoqSkJCluLDRhgxNDu/ertP0272bt7bp9ttvly9/+UuFhYvuelKHTid77yx506ADLV
Tf//5XFy9eV0/evZ3G6/furcrKyG5a1c3PGKML55YoPj5e0dHRkmtLbWskysr5e/vr1tUueWKNfif70xSLZUCK0
trdUcebvWv//9b61fv16RkZHKy8vT3LlZ9cgjj2jTpk2SyNuVULNTNX36dEVFRcnPz0/Dhw9XSkqKpk+fLoms3cLV
2VZWViosLKzV/sPCwsj/Ks6d06dly5ZpxowZ6tatmyTydrX09HT5+vrqkUceaX0evF2nqqpKDQ0NwrlpSZPnqWPP
vhA999/vx544AEVFBRI6jx5+3b0AoD0yGaz0T02xrQaQ/stXLhQBw8e107du1vN3UjWfD9a+/zz7V48WJ98MEHTt
dyXY68Xa0lpUUjRozQ888/L0kaPny4Pv74Y61fv16zZ8+26sj7+3v77bf1xhtv6K233tKQIUNUVlamLJQUhYehKzk
52aoja/dxRbZt1ZP/LTU3N2vatGlqaWnRunXrrllP3tevuLhYa9asUULJyXXnQt7X79KNPe+99149+uijkqRhW4Zp
z5492rBhgxISEq647c2WN2fQARfq2b0nunTp0uo3cFVVVa30IKB9Fi1apPfee087duxQ3759rXGHwyFJV83a4XDo/
Pnzqq6uvminVlVcXKyqqirFxcXJ19dXvr6+Kigo0Nqla+Xr62vLRd6u0adPH91xxx10Y4MHD7ZuJs9r23WWL12qZc
uWadq0aYqJiVFSUpIeffRR65MiZ00+rsrW4XDoq6++arX/r7/+mvzb0NzcrF/96lc6ceKE8vPzrbPnEnm70q5du1R
VVAx+/ftb75ufffaZHnvsMd12222SyNuVevbsKV9f32u+d3aGvGnQARfy9/dXXFyc8vPzncbz8/P1s5/9rINWdXMy
xmjhwoXKycnRP//5T0VERdjNR0REy0Fw0GV9/vx5FRQUWFhXcXJz8/PqebUqVM6d0gQ34/LTJw4UeXl5SorK70+R
owYoZkzZ6qsREwDBw4kbxcaM2ZMq/828NixYxowYIAkXt+ud0bMGfn40P9zp0uXLtbZGLJ2H1dl+90f/lS1tbUqLC
y0avbv36/a2lryv8yl5vz48ePavn27QkNDnebJ23WSkpJ080BBp/fN8PBwLV26VHl5eZLI25X8/f01cuTIq753dpq
8PXtP0qDzy870Nn5+fiYrK8tUVFSYLJQUEExwcbD799N00XtpNZd68ecZut5ud03eaU6d0WV9nzpyxalauXGnsdrvJ
yckx5eXlZvr06aZPnz6mrq70qpk7d67p27ev2b59uykpKETETjkwswbGx5sKFCx1xwDeV797F3RjydrqCwKlJ6+trn
nvu0XP8+HHZ55ptvmq5du5033njDqiFv10h0Tja33nqr2bp1qzlx4oTJyckxPXv2NI8//rhVQ9Y3rr6+3pSWlprS0L
Ijybz00kumtLTUumu4q7KdPHmyGTp0qNm7d6/Zu3eviYmJMV0mTPH48Xa0q+Xd3NxsEhMTTd++fU1ZWZnTe2dTU50
1D/Juv2u9vi93+V3cjSHv63GtvHNYcoyfn5/JzMw0x48fN6+88orp0qWL2bVrL7WPzPA3DTrgBq+++qoZMGCA8ff3
Nz/+8Y+t/xoM7Sepza/XXnvNqmlpaTFPPfWUCtGcJiAgwIwd09aU15c77efs2bNm4cKfPkePHiYoKMhMmTLFnDx50
sNHc306vEEEnb9d6//33TXR0tAkICDBRUVEmMzPTaZ68Xa0urs4sXrzY90/f3wQGBpqBAweaJ5980qlhIesbt2PHjj

Z/VicnJxtjXJft6d0nzcYz0M0IISigJCQkxM2f0NNXV1R46Su9xtbXpNdHxxff0HTt2WPsg7/a71uv7cm0160Tdfu3
J0ysrywvaNMgEBgaa2NhYs2XLfQd9dIa8bcYY495z9AAAAAAAFq4Bh0AAAAAAC9Agw4AAAAAgBegQQcAAAAAwAvQ
oMAAAAAA4AVo0AEAAAAA8AI06AAAAAAAEAEadAAAAAAAvAAN0gAAAAAAAXoAGHQAAAAAAL0CDDgAA4IU+/fRT2Ww2L
ZWVdFRSAAAEQoM0AAAAAIAxoEEHAABOQ0tLi9LT0zVo0CAFBSof//+eu655yRJ5eXlmjBhgoKCghQaGqrf/e53am
hosLYdN26cULJsnPZ333336de//rX1+LbbbtPzzz+v0XpMKCQkRP3791dmZqY1HxERIUKaPny4bDabxo0b57ZjBQB
4Bxp0AACANjzxxBNKT0/X8uXLVFRobfeeku9e/fWmTnnNHnyZN1yyy0qKirS5s2btX37di1cuPC6n+PFF1/UiBEj
VFpaqvz52vevHk6cuSIJKmwsFCStH37dp06dUo50TKuPT4AgPfx7egFAAAAEJv6+nqtWbNGGRkZSk50liT98Ic/V
Hx8vDZu3KizZ89q06ZNCg40liRlZGRo6tSpSk9PV+/evdv9PHfffbfmz58vSUpNTdXqlau1c+d0RUVFqVevXpKk0N
BQORwOFx8hAMAbcQYdAADgMocPH1ZTU5MmTpzY5lxsBkZVnEvSmDFj1NLSoqNHj17X8wwd0tT6s81mk8PhUFV1Y0
vHABwU6NBbWAAuExQUNAV54wxstlsbc5dGvfx8ZExxmuubm5Vb2fn1+r7VtaWq53uQCAToIGHQAA4DKRkZEKcgrS
hx9+2GrujjvuUFLZmRobG62xf/3rX/Lx8dHtt98uSerVq5d0nTPlzV+8eFGHDh26rjX4+/tb2wIA/n+gQQcAALhMY
GCgULNT9fjjj2vTpk365JNPtG/fPmVLZWnmzJkKDAXUcnKyDh06pB07dmjRokVKSqyrj+fMGGctm3bpm3btunIkS
0aP3++ampqrmsNYWFhCgoKUmSurr766ivV1ta64UgBAN6EBh0AAKANY5cv120PPaY//e1PGjx4sB5++GFVVVWpa9e
uysvL0zfffKORIOfqwQc1MSJE5WRkWFt02f0HCUnJ2v27NLKSEhQRESExo8ff13P7+vrq7Vr1+ovf/mLwsPDde+9
97r6EAEAXsZmLr9ACgAAAAAAEBxn0AEAAAAA8AI06AAAAAAAEAEadAAAAAAAvAAN0gAAAAAAAXoAGHQAAAAAAL0CDD
gAAACAF6BBBwAAAADAC9CgAwAAAADgBWjQAQAAAADwAjToAAAAAAB4ARp0AAAAAAC8wP8Bn0prB82f0s0AAAAASU
VORK5CYII=",

```
"text/plain": [
  "<Figure size 1000x800 with 1 Axes>"
],
"metadata": {},
"output_type": "display_data"
},
"source": [
  "plt.figure(figsize=(10,8))\n",
  "sns.countplot(y='Category', data=df3,\n",
  order=df3['Category'].value_counts().index)\n",
  "plt.title('Number of Apps in Each Category')\n",
  "plt.show()"
],
{
  "cell_type": "code",
  "execution_count": 78,
  "id": "a81d9908-d357-4e61-9ce3-46ef4950a608",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "image/png":
"iVBORw0KGgoAAAANSUHEUgAAAKQAAAHFCAYAAAT50a6AAAAOXRFWHRTb2Z0d2FyZQBhYXNlbnRwG90bGliIHZlcnNp
b24zLjguMCwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy81sbWrAAAACXBIWXMMAA9hAAAPYQGoP6dpAABrMUlEQVR4n
03dd3hUdb4G8PdMTZ/0Rgo9AgEUWCFYA0LSFNWFFzCliquiroixwVVRX470uWfYssKKrCCgourtY4mAFEWI1EgRAS
EhlPQyKdNnzv1jMgNDCKmY5Ex5P88zD8zMb858T67ef21I4iIKIKiIjIj8mkLoCIiIhIagxERERE5PcYiIiIjMj
vMRARGR32MgIiIiI/HQERERER+j4GIiIiI/B4DEREREfk9BiIiIiIiLyewxERG6yevVqCILgfAQEBCA+Ph4jRozA
kiVLUFJS0uAzWVLZEASHvd+j0+mQLZWfHTt2t0pzjX1X586dMXHixFYd52o++ugjvP76642+JwgCsRky3Pp97vbt
99i0KBBCA40hiAI+Pzz6/6mSNHjkaQBCiVShQWFrZ/kc3YsW0Hy79DuVy0mJgYTJo0Cfv372/zcd966y2sXr26we
v5+fkQBKHR94i8CQMRkZutWrUke/bswZYtW/CPf/wD119/PV566SX06tULW7dudWL7//33Y8+ePa06vk6nw/PPP9/
qQNSW72qL5gLRnj17cP/997d7DW0liiKMTzGpVKJL7/8Env27MGwYc0u+rn33nsPAGCxWPDBBx+0d5ktsnjxYuzZ
swc7duzAX//6V+zevRvDhg3DqV0n2nS8pJRQkIC9uzZgwkTJlxjxUTSUKhdAJGvSU9P6BBg5zP77rrLvz5z3/Gz
TffjKlTp+LUqV0Ii4sDACQLJSEpKalD69HpdAgKCuoQ77qaIU0GSP9V3Px4kVUVFRgypQpGDlyZIs+YzQasW7d0v
Tv3x9LZWV4//338eSTT7ZpVfXo0cP58/7lltuQXh40Gb0nIm1a9fi+eefd9v3qNVqj7+uRC3BHikIDpCSkoJXX30
VNTU1e0edd5yvNzaMtW3bNgwfPhxRUVEIDAXESkoK7rrrLuh00uTn5yMmJgYA8PzzzuHRWbNmuVyyIMHD+K3v/0t
IiIi0K1btya/y2HDhg3o168fAgIC0LVRv7z55psu7zuGA/Pz811edwzP0Hqrhg8fj00bN+Ls2bMuwzY0jQ2ZHT16F
HfccQciIiIQEBCA66+/HmvWrGn0ez7++GM888wzSExMRfHYGEaNGoUTJ040/Y0/zK5duzBy5EiEhoYiKcIQ4c0xc
aNG53vZ2VL0QPjk08+CUEQ0LLz56se9/PPP0d5eTnuv/9+zJw5EydPnsSuXbsatHMMT17tZ+0417Vr12L+/PmIj49
HYGAggh0bhk0HdRxoXBvjC0nFxcUurz//PMYPHgwIiMjERYWhgEDBMDlypW4/L7fnTt3xrFjx7Bz507nNX8bBob
MnP8Wzt27Bh+//vfQ6PRIC4uDvfdx+0Wq3L91dVvWH27NmIjIxESEgIjkyYgDNnzjT4t1JaWooHHngAycnJUKvVi
ImJwU033dSg15WordhDRNRBbr/9dsjlcnz33XdNtsnPz8eECRNwyy234P3330d4eDguXLiA70xsmEwmJCQkIDs7G+
PGjCps2b0dw0+0k0QwdepU3H333XjooYdQV1fXbF25ubmYN28esrKyEB8fj3Xr1uHxxx+HyWTCwoULW3W0b731Fh5
44AGCpN0aGzZsuGr7Eyd0Y0jQoYiNjcwBbb76JqKgorF27FrNmzUJxtCge0IJL/ZPP/00brrrJrz33nuorq7Gk08+
iUmTJuH48e0Qy+VNfs/OnTsxeVro90vXDyTXXoRarcZbb72FSZMm4e0PP8b06dNx//33o3//pg6dSrmzp2LGTNmQ
K1WX/UchMe75557UFFRgSVLlmdlypW4+eabG7Rtzc/66aefxoABA/Dee+9Bq9UiKysLw4cP6FDh9C1a9er1nWlVl
w8AEDPnj1dXs/Pz8eDDz6ILJQUAEB0Tg7mzp2LCxcu4NlnnVgD8y//e1vodFo8NZbbwFAi342d911F6ZPn47Zs2f
jyJEjWLRoEQDg/fffBwDYbDbn3KasrCWMGDAAE/bswbhx4xocKzMzEwcPHsTf/vY390zZE1VVVTh48CDKy8tb/bMg
```


apRIRG6xatUqEYC4b9++JtvExcWJvXr1cj5/7rnnxMv/Z/jvf/9bBCDm5uY2eYzS0LIRgPjcc881eM9xvGeffbbJ9
y6XmpoqCoLQ4PtGjx4thoWFiXVld57nlpeX59Ju+/btIgBx+/btztcmTJggpqamNlr7LXXffffdoltFgsKCLzaJR
8/XgwKChKrqqpcvuf22293afffp5+KAMQ9e/Y0+n00Q4YMEWnjY8WamhrnaxaLRUxPTxeTkPjEm80miqIo5uXliQD
EV155pdnj0eTn54symUy8++67na8NGzZMDA40Furq13atvRn7TjXAQMG00tyfJdSqrTvv//+ZmtyfP6TTz4RzWaz
qNPpxB9++EFMS0sTe/fuLVZWVjb5WavVKprNZvF///d/xaioKJfv790njzhs2LAGn3H8zFatWuV8zFv7eWXX3Zp+
/DDD4sBAQH0427cuFEEIK5YsckL3ZILSxr8WwkJCRHnzZvX7LkTXQs0mRF1IPGyYYjGXH/99VCpVHjggQewZs0anD
lzpK3fc9ddd7W4bZ8+fdC/f3+X12bMmIHq6mocPHiWtd/fUtu2bcPIkS0RnJzs8vqsWb0g0+kaTAKfPHmyy/N+/fo
BAM6ePdvkd9TV1eHHH3/Eb3/7W4SEhDhfl8vlyMzMxPnz51s87HalVatWwWaz4b777n0+dt9996Gurg6ffPJJg/at
+VnPmDHDZbgxNTUVQ4c0xftb21tU2/Tp06FUKhEUFISbbroJ1dXV2LhxI8LDw13abdu2DaNgjYJGo4FcLodSqcSzz
z6L8vLyRldGtKzJ18tgmDiPu3PnTgDatGnTXN9/ve/b3CsG2+8EatXr8YLL7yAnJwcmM3ma6qN6eOMREQdpK6uDu
Xl5UhmTGyyTbdu3bB161bExsbikUceQbdu3dCtWze88cYbrfqhISEFreNj49v8rX2Ho4oLy9vtFbHz+jK74+KinJ
57hi20ev1TX5HZWU1RFFs1fe0hM1mw+rVq5GYmIiBAweiqqoKVVVVGDVqFIKdg7Fy5coGn2nNz7qpti2t9aWXXsK+
ffuwc+d0PPPMMyguLsadd94Jo9HobLN3716MGTMGAPDuu+/ihx9+wL59+/DMM88AaP7n2hJXu17L5eVQKBSiJx0a
edYdHC5Tz75BDNnzsr7772HjIwMREZG4o9//COKioquqUYiB84hIuogGzduhNVqxfDhw5tt8stt+CWw26B1Wrf/v
37sWzZMsybNw9xcXG4++67W/RdrdnbqLFfKI7XHL/QAGICAMDllykAlJWvtfh7GhMVFDxovj0XL14EAERHR1/T8QE
gIiICMpnM7d+zdetW8/Ulb/4AftcnJ9//hm9e/d2vtaSn/XV2jb2XY3p2rWrcyL1rbfeisDAQPzLL3/BsmXLnPOV
lq9fD6VSia+/tp5jQG0a08Ld4iKioLFYkFFRYVLKGRs3K0jo/H666/j9ddfr0FBAB788ks89DRTKCKpXZ2doFUS
76NPUREHaCgoAALFy6ERqPBgw8+2KLpy0VyDB48GP/4xz8AwDmk0pJekdY4duwYfvrpJ5fXPvroI4SGhmLagAEA4F
xRdPjwYZd2X375ZYPjqdXqFtc2cuRIbNu2zRLMHD744AMEBQW5ZTL3cHAWBg8ejM8++8yLLpvNhrVrlyIpKanBR00
WWLlyJWQyGT7//HNS377d5fHhxx8CuDR52KElP2uHjz/+2GWI9ezZs9i9e/dVA3VTnnjiCXTv3h0vvvvgiampqAniD
s0KhcJmQrtfrnfVfrjXXtaUcezd0by4fv36Zj+XkpKCRx99FKNHj273YV3yH+whInKzo0ePwmKxwGKxokSKBN9//
z1WrVoFuVyODRs2NFgRdrM3334b27Ztw4QJE5CSkgKDweD8pTq1CgAQGhoKFJTU/HFF19g5MiRiIyMRHR0dIuWiD
cmMTERkydPRLZWfHISerB27Vps2bIFL730EoKCGgAAv/nNb5CWloaFCxfCYrEgIiICGzZsaHR5ed++fHZZ59hxYo
VGdhwIGQymcu+TJd77rnn8PXX2PEiBF49tlnERkZiXXr1mHjxo14+eWXodFo2nROV1qyZALGjx6NESNGYOHChVCp
VHjrrbdw90hRfPzxx63eLby8vBxPffPEFxo4dizvuuKPRNq+99ho++0ADLFmyBEqLEKDLftY0JSUlmDJLCubMmQ0tV
ovnnns0AQEBzpVaraVUKrF48WJMmzYnB7zxBv7yl79gwoQJWLp0KwBmMIEHNgA5eXl+Pvf/97oCrK+ffti/fr1+0
STT9C1a1cEBASgb9++barFYdy4cbjpppuWMECVFdXY+DAgdizZ49zc0uZzP7f7FqtFiNgjMCMGTNw3XXXITQ0FPv
27UN2djamTp16TTUQOUk8qZvIZzhWYjkeKpVKjI2NFYcNGyYuXrxYLCkpaFczK1d+7dmzR5wyZYqYmpoqqTVqMSoq
Shw2bJj45Zdfunxu69at4g033CCq1WoRgDhz5kyX45Wwll71u0TRvvJpwoQJ4r//W+xT58+okqlEjt37iwuXbq0w
edPnjwpjhkzRgwLCXNjYmLEuXPn0lCjXb7KrKKiQvztb38rheoHi4IguHwnGkdd+TIEHSpEmiRqMRVSqV2L9/f5
cVS6J4aeXUv/71L5fXG1vh1JTvv/9ev02228Tg4GAXMDBQHDJkiPjVV181eryrrTJ7/fXXRQDi559/3mSbt99+WwQ
g/uc//xFFseU/a8e5fvjh+Jjjz0mxsTEiGq1WzrlllvE/fv3X/U8m/pZ0QwepFiMiIhwrub7//33xbS0NFgtVotd
u3YVlyxZiQ5cubLBqSL8/HxxzJgYmhoqAjAuZKwuVVMV/47bGy1YkVfXjvVfE4eHhYLBQkDh69GgxJydHBCc+8
cYboiiKosFgEB966CGx79+YlhYmBgYGCimpaWJzz33nHN1HtG1EkTxKsteiIjomnXu3Bnp6en4+uuvM223Y8c0jB
gxAv/617/w29/+to0q8yWffffQ0R7rnnHvzww8Y0nSo10WQn+CQGRERSebjjz/GhQsX0LdvX8hkMuTk50CVV17Brbf
eyjBEHYqBiIiIJBMAgor169fjhrDeQF1dHRiSEjBr1iy88MILUpdGfoZDZkREROT3u0yeiIiI/B4DEREREfk9BiIi
IiLye5xU3UI2mw0XL15EaGhoqzdxIyIiImmIooiamhokJiY6N/tsDANRC128eLHBHbmJiIjI05w7dw5JSUlnvs9A1
EKhoaEA7D/QsLAWiashIiKilqiurkZycrLz93hTGIhayDFMFhYwXkBERETkZa423YWTqomIiMjvMRARERGR32MgIi
IiIr/HQERERER+j4GiIiI/B4DEREREfk9BiIiIiLyeWxERERE5PcYiIiIiMjvMRARERGR32MgIiIiIr/HQERERER
+T9JAtGLFCvTr1895w9SMjAxs2rTJ+f6sWbMgCILLY8iQIS7HMBqNmDt3LqKjoxEchiZJkyfj/PnzLm0qKyurMzKJ
jUYDjUaDzMXMVfVdcQpEhERkReQNBA1JSXhXrdfxP79+7F//37cdtttu00003Ds2DFnm3HjxqGwsND5+09//+tyj
Hnz5mHDhg1Yv349du3ahdraWkyc0BFWq9XZZsaMgcJnzUV2djays70Rm5uLzMzMDjtPIiLyXxarDXt0L2NvXgUuV0
lhtYlSL0SNEERR9KgrExkZiVdeeQWzZ8/GrFmzUFVvhc8//7zRtlqtFjExMfjwww8xffp0AMDFixeRnJyM//73vXg
7diy0Hz+03r17IycnB4MHDwYA50TkICMjA7/88gvS0tJaVfd1dTu0Gg20Wi3CwsLccq5EROS7tHozVn5/Bp/sP4fi
aqPz9eTIQPzvHekYkRYrYXX+o6W/vz1mDPHvAsX69etRV1eHjIwM5+s7duxAbGwseVbsiTLz5qCkpMT53oEDB2A2m
zFmzBjna4mJiUHPt8fu3bsBAHv27IFGo3GGIQAyMmQINBqNs01jIjEYjqqrXR5EREQtUVJtw0/e3o03t/2K4mojIo
NvSIkMv14uFyFHveu2ofHPj4EnckidalUTyF1AU0eHfGRGqYMBGNCkKwYcMG907dGwAwfww4/053v0Nqairy8vL
w17/+Fbffdhs0HDGAtVqHPqIqFQqREREuBwzL440RUFVAICioiLExjZM4bGxsc42jVmyZAmef/55N54pERH53Mv
0tzz3o8oqNahLkyNv07sjTG946FSyKazWfDalpNYuSsPX/50EXqzFW//YSDkMkHqsv2e5D1EaWlpyM3NRU50Dv70p
z9h5syZ+PnnnnEA06dPx4QJE5Ceno5JkyZh06ZN0HnyJDZu3NjsMUVRhCBc+sd1+d+ban0LRYsWQavV0h/nzplr4x
kSEZG/0JusmPn+XhRU6JASGYR/PzQUE/sLQqWw/7oNUinwzITe+Gj0EKgUMmz5uRh/23hc4qoJ8IBApFKp0L17dww
aNAhLlixB//798cYbbzTaNiEhAampqTh16hQAID4+HiaTCZWVLS7tSkpKEBcX52xTXFzc4FilpaX0No1Rq9X01W+0
BxERUXP+vvkEzpTVIS5MjX89LIHkyKBG2w3pGoWl0/oDAN7/IQ+f7uN/dEtN8kB0JVEUYTQaG32vvLwc586dQ0JCA
gBg4MCBUCqV2LJli7NNYWEhjh49iqFDhwIAMjIyoNVqsXfvXmebH3/8EVqt1tmGiIjoWu3Nq8D7P+QBAF68qx/iwg
KabT+xXyIWjukJAFi86Tgq60ztXiM1TdI5RE8//TTGjx+P50Rk1NTUYP369dixYweys7NRWluLrKws3HXXXUHISEB
+fj6efvppREdHY8qUKQAAjUaD2bNnY8GCBYiKikJkZCQWLLyIvn37YtSoUQCAXr16Ydy4cZgzZw7eeecdAMADDzyA
iRMntniFGRER+a+CggKU1ZU128ZsFTHvm1KIIjCySyA0dedx80D5Zj8DAIPDRKRqFDirNeOpj37AgwM1bqk50joaK
SkpbjmWv5A0EBUXfYmZMx0FhYXQaDTo168fsr0zMXr0a0j1ehw5cgQffPABqqqqkJCQgBEjRuCTTz5BaG10x8ivvf
YaFAoFpk2bBr1ej5EjR2L16tWQy+X0NuvWrcNjjz3mXI02efJkLF++vMPPL4iIvEtBQQGu69ULep2u2XYh149H1Nh
HYKkpx6rH/oT3Tc23v5w60R3xM15E9q+1WP3X0TAVn77WshEYFIRfjh9nKGoFj9uHyFNxHyIiIv9z80BBDBw4EPc8
+QriUro12sYmat9cVEJnFdA/woluobZwf8/eMjn06eSIVtswL07aLuIXF5zGupf+Bwc0HMCQAou06Vi+oKW/vyVfd
k9ER0TJ4Lk6IaIHn0bf03ZRC521BEEQ0W7u3w0Keeun52qZsVi90x9LrhmuUcd2u0v+I3M/jJLUTERF5C5s0YL++fa
XzgjTSInoUHAAGNUKJnnH06yKGCkneVR63AQUERERNRgp0tqodWbEaCQoW+na5sQfUNy0ADgVEkNagmN1RHRFCFARER
E1EbHLtpv69Q3SePcFLgtYsMCKBQeCJsI/HRe647yqBUYiIiIiNqggmDG2Qr7arLeCe5ZbHND5jgA40gFLczW1k/0
prZjICiIiImqD40U1AIB04YEID1K55ZhdooMRfQCA0WJDxLmdW45JLcNARERE1EqiK0Ln+uGy3onu24pFEASkxdsNv
5+oD1zUMRiIiIiIWuliQFavRlKuYaesSFuPXZa/Wqz/PI6GMxWtx6bmsZARERE1ErHi+y9Qz1iQ6Fs41L7pkSFqB
EdooJNBH4tqXXrsalpDERERESTYBNFnCmlz+9xDG+5m60X6EQxh806CgMRERFRKxRWGa3W6FWyNAPLBdvs0xSeP

5Sj1qDdd2Kw9qGQYiIiKiVjhdaH/G6hodDLlMaJfvCaTUIkFjv33Hr6UcNusIDEREREQtJIripUAU497J1FfqVn/8
/HIuv+8IDEREREQtVFZrQrXBArLMOGpUULt+l+P45yv13KSxAzAQERERtZCjdyg1Msjtg8uuFBWsqOhaAatNxPLKf
bt+FzEQERERtZhjdVm3dh4uA+ybNHa0tvcScdis/TEQERERtUCd0YLSWiMA0INKE+sSFQwAyC+rgyiKHfKd/oqBiI
iIqAX01d/INSZUjSCVok0+MykiCHJBQLXBgiqduU0+018xEBEREbVAQX0gSonsmN4hAFAPZ0gUYd/rKI/DZu2KgYi
Ii0gqRBEoq0z4QARcWm3mCGTUPhiIiIiIrqLGAtQZrZDLBCTwb5jYUZLqd8MurDLAxlE7YaBiIiI6CqK9fZf153C
A6Fo5+X2V4o0VUMLl8FktaG0xtih3+1PGiIiIiIuosRg/3XZ0cNlACATBCSG23uLLRXP6L2wkBERETUHJkCpUb7P
cukCEQAnB0rL3CDxnbDQERERNQMDUIPWEUBgUo5okNUktTQqX4e0cUqPfcjaicMRERERM1QJ6cDsPfSCEL73N3+am
JDA6CQCTBYbCivM0lSg69jICiIimpGQFIaJd6aaGglwIcMwj4rBZu2AgIiIiaoLVJkKd1AsAnB0bpZIUpb+/xIn
V7Y0BiIiIqAlntRbIIMFQCCkI09SS1sJ5R02LgYiIiKgJP5fa5+tEqUXIJJo/5BAbpYgAHUmK2qNfklr8UUMRERE
RE34ucweiKLVNokrAZRyGaKD7b1URdUGiavxPQxEREREjRBFEdLHYHIM4ao4sLsgai4mjtWuxsDERERUSP01NVBa
7RBtJgQ4SGBKL7+PmrFwVYQuRsDERERUSP25VUAaIXT0Au7fQhp7iw+kBUwxu9uhsDERERUSM0FLQCAIWxjktcyS
WRwSoo5QLMVhGV3KDRrRiIiIiGnGooAoAYLzwi7SFXYEMCIgNtfcScWK1ezEQERERXUGrN+NUSS0AwFh4QuJqXmw
HMRC1BwYiIiKiK/x0rgoAEBcsh02nlbaYK3ClWftgICiIiIrqCY7isZ5RS2kIaEVe/0qyslgiLVfr9kXyFpIFoxYoV
6NevH8LCwhAWFoamJAxS2rTJ+b4oisjKyKjYiIcAwMxfPhwHdt2z0UYRqMRc+f0Rr0NIKDGzF58mScP3/epU1lZ
SUyMz0h0Wig0WiQmZmJqqqqjhfIiLyQof02SdUp0WpJK6koVC1AoFKOUQRKK1L5G7SBqIkpKS80KLL2L//v3Yv3
8/brvtNtxxxx300PPyy9j6dKLWL580fbt24f4+HiMHj0aNTU1zPMmzcPGzZswPr167Frly7U1tZi4sSJsFqtzjY
zZsAbm4usr0zkZ2djzcXGRmZnb4+RIRkeez2USP7iESBAGxofZhs9IaBiJ3UuJ55ZMmTXJ5/re//Q0rVqxATK40
evfujddffx3PPPMpk6dCgByS2YN4uLi8NFHH+HBBx+EVqvFypUr8eGHH2LUqFEAgLVrlyI50Rlbt27F2LFjcfz4c
WRnZyMnJweDBw8GALz77rvIyMjAiRMnkJaW1rEnTUREHi2vvA5avRlqhQypGs8LRAAQHarG2Qodymq59N5dPGY0kd
VqxfR161FXV4eMjAzk5eWhqKgIY8aMcbZRq9UYNmwydu/eDQA4c0AAzGazS5vExESkp6c72+zZswcajcyZhgBgyJA
h0Gg0zjaNMqNqK6udnkQEZHvc/Q09e2kgdJTDmS8QkwIe4jctfJAd0TIEYSEhECtVu0hxx7Chg0b0L2t3bxQVFQEA
4uLiXNRhxcU53ysqKoJKpUJERESzbWjYxt8b2xsRLNNY5YsWeKcc6TraJcCnHxN50LERN7hUP2GjANSI67SUjox9
UNmZbVG7ljtJpIHorS0N0Tm5iInJwd/+t0fMHPmTPz888/09wXBNZ2LotjgtStd2aax9lc7zqJFi6DVap2Pc+f0tf
SUIjIiI+XLW7m/Pjlc0jqaEX6khEImwGITodWZpS7HJ0geiFQqFbp3745BgwZhyZIL6N+/P9544w3Ex8cDQINenJK
SEmevUXx8PEwmEyorK5ttU1xc30B7S0tLG/Q+XU6tVjtXvzkeRETk2wxmK04U2Rfu9EvSSfXN02SCGjHsBLXmrMf
5IHoSqIowmg0okuXLoiPj8eWLvuc75lMJuzcuRNDhw4FAAwc0BBKpdKLTWfHIY4ePepsk5GRAa1Wi7179zrb/Pjjj
9BqtC42REREAPBzYTUsNhFRwSp0Cg+UupxmRYfatwTgPCL3kHSV2dNPP43x48cj0TkZNTU1WL9+PXbs2IHs7GwIgo
B58+Zh8eLFNGjB3r06IHFicxjKcGIM2bMAABONBrMnj0bCxYsQFRUFCIjI7Fw4UL07dvXueqsV69eGDduH0bMmYN
33nkHAPDAAw9g4sSJXGFGREQuDtcPl/VL0lxl1eobUYthD5FaSBqLi4mJkZmaisLAQGo0G/fr1Q3Z2NkaPHg0AeOKJ
J6DX6/Hww+jSrISgwcPsubNmxEaGuo8xmuvvQaFQoFp06ZBr9dj5MiRWL16NeRyubPNunXr8NhjjzLXo02ePBnLl
y/v2JMLiIKP/d/i8/TyD/ZLCP52kBWk4F5FbSRqIVq5c2ez7giAgKysLWVLZTbYJCAjAsmKLSGzSibbREZGYu3atW
0tk4iI/MRP56sAAP2TPXF+fKINjDpHOZEwd0YJgtaS/0r2ex80hIiIikkLwYwzXUUAQK0HSCmXISLInFkGYFNrhk
DEREREYCj57UQAABTeKcZ98XTcaWZ+zAQERERAFipfv6QNwyX0USDFeaVfAWHteMgYiIiAjA4fr5Q94wX0YQFWzv
ISqvYyC6VgXEREREuHyFmRf2ENWZIPIWHteEgYiIiPxeRZ0JF6r0AID0Tt4TiDSBSsgdt/DQ8xYe14KBiIiI/N6RC
/beoS7RwQgLUepCtCvJBMG50qyCw2bXhIGiIj83tH6Q0RNvUM0USGcR+Q0DERER0T3jtTPH+rbyftu5B0VbJ9HxE
B0bRiIiIjI7x3x5h4iRyDiXkTXhIGiIj8WuVLE6r7JHphIKofMqvUmWHjSrM2YyAiIiK/dvSivXcoNSoImkDvmVD
tEBaggEImwMqVZteEgYiIiPyANw+XAFyboUC6h804j6itGIiIiMiv0VaY9fXSQARcPrGa84jaioGIiIj82hfCET1
84h4T702YyAiIiK/VaUz4VxF/Q7VXjih2iEiuH5zRh0DUVsxEBERkd86drEaAJASGQRNkPdNqHaIDLIPmVXqz0BCs
7ZhICiIiIr/lC8NLABAWoIRcsK8001mlrsY7MRAREZHfcgSiPl64Q/XLZDIB4fU9XDVMqEJqvBMDERER+S1fWGHmEF
E/bMZA1DYMRERE5Je0ejP0lusAePeEagfHx0oaCwNRWzAQERGRXzpW3zuUFBGIiPp9fLyZY2J1LXuI2oSBiIiI/JL
jlh2+MFwGwBnq0GTWNqXERETkl45csC+599ZbdLzJMYfIYBMgqIMlrsb7MBAREZFf0url9zC7kkohQ7BaDgBQRnaS
uBrvW0BERER+p9pgRl5ZHQDfGTIDLvUSKA0SJK7E+zAQERGR3zLWP1zWKTzQead4X+CYWK2MTJa4Eu/DQERERH7n0
nCZd2/IeCXHxGr2ELUeAxERefkdX7llx5Ui6nerVnA0UasxEBERkd/xtQnVDs4eooHEWG28y2trMBAREZFfQGYcc
YHJ1QDQKhaAZkgQpArUmQ7vLYKAXERefmVo5dNqI4KUUtCjXsJgoAQhb1n6GKNReJqvAsDERER+RVfnVDtEKKw/1l
Ywx6ilMAGiIiiv3K4PhDlSwqXtpB2EqKs7yGqZQ9RazAQERGRX/HVCdU0jiGzwl2ELUGAXERefKNX92h+nL0QM0S
RK3CQERERH7D0TvkaztUXy60fsisVGeFyWKTUbrvU0BERER+46iPbsh40bUMsBl1sILAQYV06nK8BgMRERH5jSP1S
+77JvluIBIEwF5EQCQZ288SFcnaSBasmQJfv0b3yA0NBsXsbG48847ceLECZc2s2bNgaiILOhQ4a4tDEajJg7dy
6io6MRHByMyMn4/z58y5tKisrkZmZCY1GA41Gg8yZMTFRVVBX3KRIRKQc5cr4KgG/3EAGApT4Q5TEQtZikgWjnzp1
45JFHkJOtGylbtsBisWDMmDGoq309gOPGjUnhYaHz8d//tfl/Xnz5mHDhg1Yv349du3ahdraWkyc0BFW66U9jNm
zEBubi6ys70RnZ2N3NxcZGZmdsh5EhGR9KoNZuSX24eQfD0Q0XqI8soZiFpKIeWXX2dnuzxftWoVYmNjceDAAdx66
63019VqNeLj4xs9hlarxcqVK/Hhhx9i1KhRAICla9ci0TkZw7duxdiXy3H8+HFkZ2cjJycHgwCPBgC8++67yMjIwI
kTJ5CWltZ0Z0HERJ7i8gnVET46odrBUSes9byqDLewq39H2tkZKTL6zt27EbsbCx69uyJ0XPmoKskXpneqQMHyDa
bMWbMG0driYmJSE9Px+7duwEAe/bsgUajcYyHABgyZag0Go2zzZWMRi0qq6tdHkRE5L20nHdsy0jvbUPAZT1EDEQt
5jGBSBRFzJ8/HzfffDPS090dr48fPx7r1q3Dtm3b80qrr2Lfvn247bbbYDQaAQBFruVQqVSIiIhw0V5cXByKioqcb
WJjYxt8Z2xsrlPNLZYsWeKcb6TRaJCcn0yuUyUiIgkC8fENGs/nmENUQdVAb+IGjS0h6ZDZ5R599FEcPnwYu3btcn
l9+vTpzr+np6dj0KBBSE1NxcANGzF16tQmjyeKIgRbCd6//09NtbncokWLMH/+f0fz6upqhiIiIi/mD0vuHwz6aoS
oBNSaRjYtqMN18b553z38ogeorlz5+LLL7/E9u3bkZSU1GzbhIQEpKam4tSpUwCA+Ph4mEwmVFZWurQRKS1BxFyc
s01xcXGDY5WWljrbXEmtViMsLMzLQURE3kmr958J1Q7x9Xd5zS/jXkQtIWkgEkURjz76KD777DNs27YNXbp0uepny
svLce7c0SQKJAAABg4cCKVSiS1btjJbFBYw4ujRoxg6dCgAICMjA1qtFvn37nW2+fHHH6HVap1tiIjIdx2r7x1KiV
D9CdU08cFyAEBBBeCRtYSKQ2aPPPIIPvroI3zxxRcIDQ1l1zUFraDQIDAXEbW0tsrKycNdddyEhIQH5+fL4+umnER0
djSlTpjjbzp49GwsWLEBUBQIyOxc0FC903b17nqrFevXhg3bhzmzJmDd955BwDwwAMPY0LEiVxhRkTKB4740XCZ
g60H6Gw5e4haQtJAtGLFCgDA80HDXV5ftW0VZs2aBblcjINHjyCDDz5AVVUVEHISMGLECHzyySCIDUQ11tn/ttdegU
Cgwbd06PV6jBw5EqT4r4ZcLne2WbduHr577DhnaRtJkydj+fLL7X+SREQkuc00Q0QHk8wc4KcPUQMRC0haSASRb
HZ9wMDA/HNN99c9TgBAQFYtmwZLi1b1mSbyMhIrF27ttU1EhGR9/0nCdU08fWBiD1ELEMRk6qJiIjai1Zndoac9EQ
/CkTB9j6PC1V6mK286/3VMBAREZFP03rR3juUH0k/E6oBICJQBRCBqtNxmUqvdTleDwGIiIi8mn+0KEaAGSCg0TI
IAAcNmsJBiIiIvJpjl2+MM01VdKdQQiTy+KgYiIiLyaY4eon6dwqUTRAIpUfZAVMC73l8VAXERefksrc7sXHae3
sn/7jiQyiGzFmMgIiIin+XoHUQODER4kP9MqHZIjQoGwL2IWoKBiIiIfJY/D5cBlw2ZVeiuuvefv2MgIiIin+XYKN

EfJ1QD9nu3CQKgM1LRWmuUuhyPxkBEREQ+6/CFKgD+t+TeQa2QI1ETCAA4x2GzZjEQERGRt6rSmXCuwr4hob8GIgB
I4cTqFmEgIiIin3T0QjUAeyDQBCkLrky6qVEMRC3BQERERD7pp/NVAPzrDveNuXxiNTWNgYiIiHxS7rkqAMANyeGS
liG1lEj70vuz3JyxWQxERETkc0RRdAai/v4eiNhD1CIMRERE5H0Kqg0orTFCLhPQJ9H/dqi+nGPiRkZWhFqjReJqP
BcDERER+Zyf6nuHesaFIkikLYYiYUfKBFrp6m8gB0rm8RAREREPIf3nH1Dxuv9fLjMlcV5Cw/OI2oKAXEREfkcRw
/R9cn+vclMgTd5vToGIiIi8ilWm+i8h5m/T6h2c05FxInVTWigIiIin3KmtBa1RguCVHL0iA2Vuhyp4Nitm0ImS
ZAREREPSWx3D69kwZymSBtMR4itX400VnOIWoSAXEREfKuxw7VnFB9iWPI7GKVAWarTeJqPBMDERER+RTnhoxJ4ZLW
4ULiQtRQK2Sw2kRcqnRLXY5HYiAiIiKfYTBb8UthDQCgPleY0clkwqW73nNidaMYiIiIyGcculGni0lEdIgKncIDp
S7Hozhv4cF7mjWqTYeOLy/P3XUQERFds58uGy4TBE6ovlyK8yav7CFqTJsCUffu3TFixAisXbsWBoPB3TURERGLiW
NCNfcfaoh7ETWvTYHop59+wg033IAFCxYgPj4eDz74IPbu3evu2oiIiFrl0g7V4ZLW4YkcN3k9x0DUQDYFovT0dCx
duhQXLlZaqlWruFRUhtvvhL9+vTB0qVLUVpa6u46iYiImLWlMyG/fjioXxInVF/JuTljhQ6iKEpcjee5pknVCoUC
U6ZMwaeffoqXXnoJp0+fxsKFC5GUlIQ//vGPKCwsdFedREREzfrpvP12HV2igxEepJK4Gs/TKTwQggDoTFaU15mkL
sfjXFMg2r9/Px5++GEKJCRg6dKLWlhwIU6fPo1t27bhwoULu00009xVJxERUBMuTahm71BjApRyxIcFALD3EpErRV
s+tHTpUqxatQonTpzA7bfffjg8++AC33347ZDJ7vurSpQveeecdXHfddW4tloiIqCn0QMT5Q0lKjgxCodaAcxU6DEi
JkLocj9KmqLRixQrcd999uPfeexEfH99om5SUFKxcufKaiiMiImoJURS5wqWUiKDsDevgh0rG9GmQHTq1KmrTLGp
VJg5c2ZbDk9ERNQqf6r0KKs1QSET0DshT0pyPNbLE6vJVZvMEK1atQr/+te/Grz+r3/9C2vWrLnmooiIiFrjP3P2C
dW9EsIQoJRLXi3nYiBqWpsC0Ysvvojo60gGr8fGxmLx4sXXXBQREVFrxBou44Tq5iRH0vYi4gler9SmQHT27FL06d
KLweupqakoKC145qKIiThag3e4b5nkSPv93S5q9TBZbBJX41naFIhiY2Nx+PDhBq//9NNPiIqKuaaiiIiWspiteF
I/R5EN6SES1uMh4sJUSNAKYMo2udd0SVtCkR33303HnvsMwzfVh1WqxVWqxXbtm3D448/jrvvvrvFxlmyZAL+85vf
IDQ0FLGxsbjzzjtx4sQJLzaiKCIrKwuJiYkIDAzE80HDcezYMZc2RqMRc+f0RXR0NIKDgzF58mScP3/epU1LZSUyM
z0h0Wig0WiQmZmJqqqqtPw+ERF5kFmLtdCbrQhRK9A10kTqcjyaIAicR9SEngWiF154AYMHD8bIkSMRGBiWMBaJB
kzBrfddLur5hDt3LktJzyCHJycrBlyxZYLBAmgTMGdXV1zjYvv/wyli5diuXLl2Pfvn2Ij4/H6NGjUVNT42wzb94
8bNiwAevXr8eUXbtQWluLiRMnmq10tvMmDEDubm5yM70RnZ2NnJzc5GZmdmW0yciIg/i2H+oX5IGMhncvH81DES
a90ye5VKHu8++QT/93//h59++gmBgYHo27cvULNTW3wc70xsl+erVq1CbGwsDhw4gFttvRWiKOL111/HM888g6lTp
wIA1qxZg7i40Hz00Ud48MEHodVqsXLlSnz44YcYNWoUAGdt2rVITk7G1q1bMXbsWBw/fhz22dnIycnB4MGDAQDvvv
suMjIyc0LECaSlpbXlX0BERB6A+w+lzqWJl1QxEl7umW3f07NkTv/vd7zBx4sRWh6HGALX2MeDIyEgAQF5eHoqKijB
mzBhng7VajWHDhmH37t0AgAMHDsBsNru0SUXMRHp6urPNnj17oNFonGEIAIYMGQKNRuNscyWj0Yjq6mqXBxReZ7c
+iX3nFddMikMRI1qUw+RlWrF6tWr8e2336KkpAQ2m+tM9W3btrX6mKiOYv78+bj55puRnp40ACgqKgIAxMXFubSni
4vD2bNnnW1UKHuIiIatHF8vqioCLGxsQ2+MzY21tnmSkuWLMHzzz/f6vMgIqK0ozdZcblYPOXievYQtQiHzBrXpk
D0+00PY/Xq1ZgwYQLS09MhCnc+Zvvoo4/i80HD2LVRv4P3rjy+KIpx/c4r2zTWvrnjLFq0CPPnz3c+r66uRnJycrP
fSUREHew+SpYbSLiwtSI1wRIXY5XcAaicl2Lfp/6izYFovXr1+PTTz/F7bff7pYi5s6diy+//BLffcdkpkKSnK87
7pNWVFSEHIEQ5+SLSXOXqP4+HiYTCZUVLa69BKVLJRg6NchzjBfXcUnvRe0tLRB750Dmq2Gwq2+9pMjIqJ2c7CgC
gB40VJSEIqWb6IAowVasRnhQsqJK/ImbZpDfKp0L1792v+clEU8eijj+Kzzz7Dtm3bGmz22KVLf8THx2PLi3010
wmE3bu30kM0wMHD0VsqXRPu1hYiKNHjzrbZGRkQKvVYU/evc42P/74I7RarBMNERF5n0MFLQAYiFojUCVHTKj9P/g
5bHZJmWLrggUL8MYbb0AUxWv68kceeQRr167FRx99hNDQUBQVFaGoqAh6vX2zKEEQMG/ePCxevBgbNmzA0aNHMwVW
LAQFBWHGjBkAAI1Gg9mz22PBggX49ttvcejQIfzhD39A3759nav0evXqhXHjxmH0nDnIyclBTk405syZg4ktJ3KFG
RGRlxJF0dLdXA0ZW4fziBpq05DZrL27sh37dmzatA19+vSBuql0ef+zzz5r0XFWrFgBABg+fLjL66tWrcKsWbMAAE
888QT0ej0efvhhVFZWYvDgwdi8eTNCQ00d7V977TuoFApMmzYner0eI0e0x0rVqyGXX7rB37p16/DYY485V6NNnjw
Zy5cvb+2pExGRhzhfqUdZrRFKuYD0TryHwWukRABhwNLkBLlTckQhYeHY8qUKdf85S3pYRIEAVLZWcjKymqYTUBA
AJYtW4Zly5Y12SYyMhJr165tS5LEROSBDtYPL/V01PA0963EvYgaalMgWrVqlbvrICiIapVDjuEyLrdvNQ6ZNdTmj
RktFgu2bt2Kd955x3kbjYsXL6K2ttZtxRERETXF0UM0IJUTqlvr0uaMvMGrQ5t6iM6ePYtx48ahoKAARqMR0ePRm
hoKF5++WUYDaa8/fbb7q6TiIjlyWC24ueL9jsID0CE6LZzBKILVXpYrDY05Nd04wqf0Kafw00PP45BgwahsRISgYG
BztenTJmCb7/91m3FERERNEBIS0sNhExoWp0Cg+8+gFIRWyoGiQFDfabiEktQepyPEKbV5n98MMPUKlcn3NKTU3F
hQsX3FIYERFRUw6edew/FM6dlttAJh0QHbGI06V1KKjQ0SdZ+7M29RDZbDZYrdYGr58/f95l0TwREVF70MQdqg8ZJ
1a7alMgGj16NF5//XXnc0EQUFtbi+eee85tt/MgIiJqjH1DRnsP0Q0MRG2WzEDkok1DZq+99hpGjBiB3r17w2AwYM
aMGTh16hSio6Px8ccfu7tGIiIipwtVepTUGKGQCeixXA0Z24o9RK7aFIgSEx0Rm5uLjz/+GAcPhoTNZsPs2bNxxx3
3uEyyJiIicjFhCfnvXDBuyHgNuDmjzYFIgAIDAzEfffhd/vuu8+d9RARETXL0VzGDRmvCXuIXLUpEH3wwQfNvv/H
P/6xTcUQERFDjeOTqQ8do4eoiqdGZUGwKIC1Be50r+U2B6PHH3d5bjadobPpoFkEBQUxEBERETtWrf4hoxYAV
5hdq3C1ALHbKjTmXmCuQoc+if49H6tNq88wKytdHrW1tThx4G9RuvvLmTqomIqJ2c+YiFmar0iOgQFZiI07WnEe0S
Vu26u7R48eePHFFxv0HhEREbnLwbNVA0zL7bkh47XjPKJL3HrzErLcj0sXL7rzKERERE6X9h8Kl7YQH8FAdEmb5hB
9+eWXLs9FUURhYSGWL1+0m266yS2FERERXU4URezLrWAA/KZzpMTV+IbkSPuwYwHvet+2QHTnnXe6PBCEATEXmBjt
ttvw6quvuqMuIiIif/nlOpTVmqBSyLgho5tWdtElbQpENpvN3XUQERE1a1+evXeof5IGagU3ZHQHx5DZ+UodrDYRc
pn/zsty6xwiIiKi9rKXw2VuL6AJhEImwGvVUVrtkLocSbWph2j+/Pktbrt06dK2fAUREZGL/QxEbieXCUIKCEr+uQ
4F5Tp0CvffrQzaFIgOHTqEgwcPwmKxIC0tDQBW8uRjy0VYDBgwwNm0SyKJiMgdSmoMyC/XQRC4Q7W7JUcGiB9ch30
V0mQgSupyJN0mQDRp0iSEhoZizZoliIiw/80srKzEvffeiltuuQULFixwa5FEROTf9ufbl9tffX8GTaB/32LC3VI4
sRpAGwPRq6++is2bNzvDEABERETghRdewJgxYxiIiIjIrfbm0YbL2DvUUsePH29R07m+FgCQ+++t5HIyua8+SmhUdH
Y2ULBTJvr9Ngai6uhrFxcXo06ePy+sLJSWoqalxS2FEREQ0+89y/LBLVVeUAgD+8Ic/tKh9UM+hiJnyNLbuycXaRx
a2Z2nNCgwKwi/Hj0sWitoUiKZMmYJ7770Xr776KoYMGQIAyMnJwf/8z/9g6tSpbi2QiIj8W43BjJ8vVgNgIGoJfa3
9ZzXhwWeQ1m/gVdtXmQR8WwSEJadhj8+a+/yGlVccBrrXvofLJWVeVcgevvtt7Fw4UL84Q9/gNlsth9IocDs2bPx
yiuvuLVAIiLyb4cKqMAT7bsqx2sCpC7Ha0QlpiKpR5+rtosxw/Ft0RkYbQJiu/SCSuGf0/K0KRAFbQXhrbfewiuvv
ILTp09DFEV0794dwcHB7q6PiIj8nPN2HansHwPaqUcaoUMRosN1QYzokPUUpckiWuKgYWFhSgsLETPnj0RHBwMUR
TdVRcRERGAyyZud2Egai+0LxtavVniSqTTPkBUXL60kSNHomfPnrj99ttRWFgIALj//vu5woyIiNzGZLEH91wVAK4
wa08MRG0MRH/+85+hVCPURFCAoKAg5+vTP09Hdna224ojIiL/duSCFkaLDRFBsNslCZG6HJ8VVh+Iqv04ELVpDtHm
zZvxzTffICKpyeX1Hj1640zZ524pJiIyHg7jkGdI3n3g3YUXh+Iqvw4ELWph6iurs6LZ8ihRKhMarV/TsYiIiL3c
0yovpHL7duVc8hMx0DUKrfEeis++0AD53NBEGCz2fDKK69gxIgRbiu0iIj8l80mYv9Z+y070KG6fWmC6ofMDGby/H
SBVJuGzF555RUMHz4c+/fvh8lkwhNPPiFjx46hoqICP/zwg7trJCIiP3SqPBZV0jMCLDL0SQtuhyfFqJWQC4IsIo
iag0W55wif9KmHqLevXvj80HDuPHGGzF69GjU1dVh6tSp0HToELp16+buGomIyA/t0V0GwL47tVLun5sFdhSZICAs
0N5H4q/ziFrdQ2Q2mzFmzBi88847eP7559ujJiIiIuw+XQ4AGNI1SuJK/IMmUilKndk+j8gPRYhbHbmVSiWOHj3K2

f5ERNRurDYRP9ZvyDi0GwNRRwgPVAHw372I2tQH+cc//hErV650dy1EREQAg00F1dDqzQhRK9C3k0bqcvyCY2J1ld
4kcSXSaNOkapPjHpfEew9btmzBoEGDgtzDb0nSpW4pjoI/N0e+uGyG7tEQsH5Qx3C33erbtW/sjNnzSbms+Ho0aM
YMGAawsLCcPLkSRw6dMj5yM3NbfHxvvvu00yaNAMJiYkQBAGff/65y/uzZs2CIAgujyFDhri0MRqNmDt3LqKjoxEc
HIzJkyfj/PnzLm0qKyUrMzKjJyUDjUaDzMXMVVtebUiYioA+2un1DN4bK0E35ZIPLHe502qoeOR48eKCwsxPbt2
wHYb9Xx5ptvIi4urklfXldXh/79++Pee+/FXXfd1WibcePGYdWqVc7nKpXK5f158+bhq6++wvr16xEVFYUFCxZg4s
SJ0HDgA0Ry0QBxowZOH/+vP02Ig888AAyMzPx1VdfTalUiiJqP2arzXLDV06o7jih9avMzFYR0pMVweo2DSJ5rVa
d7ZWJcd0mTairq2vzl48fPx7jx49vtolarUZ8fHyj72m1WqxcuRIffvghRo0aBQBYu3Ytkp0TsXXrVowd0xbHjx9H
dnY2cnJyMHjwYADAu+++i4yMDJw4cQJpawltrp+IiNzvyAUT6kxWaAKV6J3A/Yc6ikImQ2iAAjUGC7R6s98Fomsam
02ILrUd03YgNjYWPXv2xJw5c1BSUuJ878CBA85tABWSeX0Rnp603bt3AwD27NkdJUbJDEMAMGTIEGg0GmebXhINRL
RXV7s8iIio/e3+1T5cNqRrJGQYrmjuSP48j6hV8c8xj+fK19rL+PHj8bvF/Q6pqaNiy8vDX//6V9x22204c0AA1Go
1ioqKoFKpEBER4fK5uLg4FBUVAQCKiooQGxvb4NixsbH0No1ZsmQJ91kiInKzgoICLJWVNdvmv4fsE6o7q/U4ePBg
R5TVp0PHj0v6/R0tPFCJ85V6v9ycsdVDZrNmzXLewNVgM0Chhx5qsMrss88+c0tx06dPd/49PT0dgwYNQmpqKjZu3
IipU6c2W+flQa2x0HZlmystrWQI8+fPdz6vvrq5GcnJya0+BiIjQFRQU4LpevaDX6ZpsI6gCkFzYxxDkCjz7w0/wtL
a4AytSWMl1trdQldAjH0nt/vMlRqWLrZJkxZ7/4Q9/cGsXV50QKIDU1FSc0nUKABAFHw+TyYTKyKqXXqKSKhIMHT
U2aa4u0H/oEPLS5udDK5Wq53Bj4iIr1LZWnR00h3uefIVxKU0fpunizoBe8oUCFaIeGzxig6usKHje3di05o3YDAY
pC6LQ3DiRIUuX+0lhflYcpw7dw4JCQKAgIEDB0KpVGLLi2YNm0aAKCwsBBHjx7Fyy+/DADIyMiAVqvF3r17ceONN
wIAfvzxR2i1WmdoIiKijh0X0glJPfo0+t6pEYUAt0gaF46kHg2n03S04oLTUfpQoRy7Vvfp/G9zRkmknfW1uLXX3
91Ps/Ly0Nubi4iIyMRGRmJrKws3HXXXUhISEB+fj6efvppREdHY8qUKQAAjUaD2bNnY8GCBYiKikJkZCQWLLyIvn3
70led9erVC+PGjc0c0XPwzjvVALAvu584cSJXmBEReZiCcvtwWmpUkMSV+Kfw+iEzg8UGg9mKAKVc4oo6jqSBaP/+
/RgxYoTzuWP0zsyZM7FixQoc0XIEH3zwaAqqpCQkIARI0bgk08+QwhoqPMzr732GhQKBaZnmwa9Xo+RI0di9erVz
j2IAGDdunV47LHhNkVRJk+ej0XLl3fQWRIRUuto9WZU6c0QBCApILdQcvySui5DsFq00qMVVToz4jUMRBli+PDhzS
7d/+abb656jICAACxbtgZLl1rsk1kZCTWr13bphqJiKhj0HqHEsICoFb4zy9iTxMRqEKdUY8qnQnxmgCpy+kwwEE
MERF5hLMV9o1+U60Cr9KS2pnj2KzSzyZWmXAREZHkLDYbCio4f8gThAf558RqBiIiIpLchUo9zFYRQSo5Yk055YmU
HD1EVX62FxEderERSS6/fv5Ql+jgdr0DAL2d4673VTr/uus9AxEREULKFEXklDnnD3Xm/CHJ0TznNf1t0JutElfTc
RiIiIHuPU6M7R6M+SCgJRiZh+SmkJuv+s94F/DZgxEREQkqfz63qF0EYFQKfhryRP44zwi/ssjIiJJ0YbLukRzuM
xTOG/hofeflWYMREREJBMd2YoLWj0AoD0X23sM9hARERf1oDNLdRBFIDpE5dz/hqTHQERERNSBTpfUagC6xYRiXAl
dLuKyITN/WXrPQERERJIWwWw4W787dfdyBiJPEhaohCAAZquI0qN/LL1nICiIiIkmcLa+D1SZCE6hEVDChzyJXCZA
E1B/TzM/uYUHAxEREUni1L7cFn3mBDuTu2BIupDagUDERERUfuw2GzIL7MPL3WL5XJ7TxRZH4gq6xiIiIi2kVBu
Q4mqw3BajniwwKkLocaERHkGDLzj5VmDERERNThThbbh8t6xIZyuMxD0XqIKthDRERE5H4WG3CmzB6I0uJCJa6Gmh
JRvy9UrdeCK8UmcTjt4GiIIG6VJFeBrNVRfiAANFhaqnLoSYEK0IIVMoB+MdkMwYiIiLqU0d09l89PeM4X0bnpB0
rGyIiIjCrlAfoUHVd0E90Vzm8ZwTq+t8f2I1AxEREXWyoJ4ZsEFAZLAK0SHcjNHT+dNeRaxERETUYULSbwNgn0zN
4TLPFxkP3sRMRAREVGHKKmZIC1PwDgung0l3kDRw9Rlc4Mm4/f5JWBiiIi0sT0s3oAKIzahrBapTVUeUEBSggL
wmwiiKq9b49j4iBiIiI00iIRbw9EqcG+v6eNrxAEwTmx2tfnETEQRERFRuztYUInCWitsJj06BTEQeRPnjtWIDE
RERETX5N8HLgAAdCd2Q8HfPF4lKs+SewaZj0+s5j9LiIjQvZqTBV/9dBEAUHf0W4mrodaKru8hKq81SlxJ+2IgiK
idvX1T4WoNVqQEckHoeCI10VQKzL6iCrrzLDafHelGQMRERGLq4/3FQAARnYJAuC7v1B9VViAAkq5fawZ1odXmjEQ
ERFRu/mlqBqHCqqgkAm4rUug10VQGwiCgKjg+nLEpjxsxkBERETtZv3ecwCAMX3iEB4gl7gaaquoEMc8It+dWM1AR
ERE7UJvsuKzg+cBAHf/JkXiauhaRDkmVtexh4iIiKhVvvpAqoNFqREBUHm7tFSL0PXINqx9J49RERERC0niiLW7D
4LAPjDkBTIZLyRqzdzDJlp9WaYrb65sSYDERERud3Bgkr8XfGnTUKGaY0SpS6HrLGQSoFApX00WIWPbtDIQERERG7
n6B264/pEhAepJK6G3MHRs+Srk80YiIiIyK1KagzYdLQQAPDHjM7SfKnu45hH5KsrzSQNRN999x0mTzQExMRECIKA
zz//30V9URSRLZWfXmREBAYGYvjw4Th27JhLG6PRiLLz5yI60hrBwcGYPHkypz8/79KmsrISmZmZ0Gg00Gg0yMzMR
FVVVTufHRGRf1q75yzMVhEDUsKR3kjdTnkJtH1PUSlNewhcru6ujr0798fy5cvb/T9l19+GUuXLSxy5cuxb98+xM
fHY/To0aipqXG2mTdvHjZs2ID169dj165dqK2txcSJE2G1Wp1tZsyYgdzcXGRnZyM70xu5ubnIzMXs9/MjIvI30pM
FH+TYh8vm3NJV4mrInWJDAAAJTVGiKlv7TiukPLLx48fj/Hjxz6f6niiKeP311/HMM89g6tSpAIA1a9YgLi40H330
ER588EFotVqsXLKSH374IUaNGGUAWL2LZKTk7F161aMHTsWx48fR3Z2NnJycjB48GAawLvuuMjAyc0HECawlpH
X0YrER+4N8HzqNKZ0ZKZBDG9ImXuhxyo6hgFeQyASarDvV6MyJ8bG6Yx84hysvLQ1FRECaMGen8Ta1WY9iwydi9ez
cA4MCBAzCbzS5tEhMTKZ6e7myzZ88eaDQAxgCgCFDhkJ0tjBNMZ0NKK6utrlQURETbPaRLz3fR4A4P5bukD0pfY
+RSYTEFM/j6i42iBxNe7nsYGoqKgIABAX+fyleXcnp09oqIiQfQqERENsmNja2wffJY20dbRz4ZMKs55wjUaD
5GQuGyUias43x4pXUKFDRJASvXvI/8/0RXfH9kBU4oPziDw2EdKigut/YyIi20C1K13ZprH2Vzv0okWLnOVqnY9z5
861snIiIv8hiiLe+e4MACBzSCoCVbxvmS9yzi0qZiDqMPHx9rHnK3txSkpKnL1G8fHxMJLMqKysbLZncXFxg+0Xlp
Y26H26nFqtRlhYmMuDiIgat/9sJX46VwVWQoZMLrX3WbH1PUSlPjix2mMDUZcuXRAfh48tW7Y4Xz0ZTNi5cyeGDh0
KABg4cCCUSqVLM8LCQhw9etTZJiMjA1qtFv37nW2+fHHH6HVap1tiIjo2vyzvnforGfJiAlVS1wNtZfIIBUuJonV
OrPU5biVpKvMamtr8euvvzqf5+XLITc3F5GRkUhJSCg8ef0wePFi90jRAZ169MDixYsRFBSEGTNmAAA0Gglmz56NB
QsWICoqCpGRkVi4cCH69u3rXHXWq1cvjBs3DnPMzME777wDAHjggQcwceJErjAjInKD06W12Hrc3hN//yldJK6G2p
NMJiAmVI1CrQHFNQZEBPv0SjNJA9H+/fsxYsQI5/P58+cDAGb0nInVq1fjiSeegF6vx8MPP4zKykoMHjwYmzdVrmh
oqPMzr732GhQKBaZnmwa9Xo+RI0di9erVkmSvjV+vW7c0jz32mHM12uTjK5vc+4iIiFrnve/zIIRaQF5x6BYTInU5
1M5i6wNRSbUR1/nQzggSBqLhw4c30wYpCAKysrKQLZXVZJuAgAAsW7YMy5Yta7JNZGQk1q5dey2LEhFRIWq1evzng
P3uAA/cyo0Y/UFcWAAALYprfGvpvcf0ISiIIs/3zs4zMf1tGNwLEjd2iZS6H0aA9kBkX2lmtfn0xGoGiIiIap0Sag
M+2lsAAHh8ZA+Jq6G0EHgKRKBSDotN9KkNGhmIiIioTf753RmYLDYMSolARcoqcuhDiIIAhLD7b1EF6r0ElfjPgX
ERETUaiU1Bqz90X4T18dG9rjghrnrkW5IiggAwEBERKZ/7x7ZfYTDbcENKOG7pES110dTBOoUHAgAKqwyw+cg8IgYi
IiJqlXMV0ufcof8Zm8beIT8UFaKcWiGDyWpDaa1v3MaDgYiIiFrljW9PwwVcXP3aAztxt4hfYQTBCTW9xJdqPSNY
TMGiIiIarFTxTX47KB936GFY7nbvz9zDJv5yjiWiBiIiImqxJZt+gU0ExvS0w/XJ4VKXQxK6PBD5wo1eJd2pmoiI2q
6goABLZWUD9n25RUZs+6UCGgYnGRDwYMHw/X548ePt1NLJIXYUDWUcgFGiw3FNUBE12/Y6K0YiIiIvFBBQGu69U
Lep2uY75QkChh3jehiumMyn1fYNKL77b5ULW1tW4sjQikwliJqGryW10F1Sy0BEREQdr6ysDHqdDvc8+QrIUrql
+/edqZXhUIUCSpMie+4YD9XU8a0+XvG907FpzRswGHxnd2N/1z0mxB6ISmtxU3fvnmDPQERE5MXiUroHqUefdv00v
cmKjXvyAdiQ0S0GXVMi2nSc4oLTbq2LpNc50ggyAajUmVFRZ0JksErqktqMk6qJiKhZu34tg8FiQ3SICv2SwqUuhz
yIWiFHcqR91+pfS717KJSBiIiImnShSo+fC6sBACPSYiGXCnRGctU9JgQAcLqEgYiIiHyQxWrdtL9KAAB9Es0cG/E
RXa5rTDAoKTGiGqDWeJq2o6BiIiGpWTV4GK0hMCLXKvznBL7SdIpUBiuH2F2YmiGomraTsGiIiiauBiLR4Hz1YC

AEB2ikWgUi5xReTJ0hM1AICfzLXB6qU3e2UgIiIiFyaLDVt+LoYIoFd8KLrVzxEhkrPuFAEq+WoMlm9tpeIgyiIi
JxEUCS2X0pQpTcjRK3AsJ4xUpdEXkAuE5y3cjLYU0mVt/JgICiIiIqejF6txorgGggCM6xMPNYfKqIX6JmqgLAzorZ
PhbEUH7aDuRgxEREQEACiuNmDnyVIAwNBuUegUwVVL1HJqpdw5L2jXqTJYrDaJK2odBiIiIkKtwYKvDl+E1SaiS3Q
wBrZxN2rybWNTIXCoLK08zoTvf+24Gw+7AwMREZGfM1ls+PLwRdQZrYgMvMfsnzgIAjdgPNYLviswtk8cA0DweS10
e9Hu1QxERER+zGoTseloIUprjAhUyJG5fyLUCs4borZLjQrGgJRWAMCmo0U4elHrFZ0sGYiIiPyUTRTxzbeI5Jfro
JAJmNQ/AZpApdRlkQ8Y2i0aXaKDYbWJ+PZ4CbKPFaFSZ5K6rGbxvvdERH7IZh0x9ZdinCqphUwAJvZLQIKG6jJPe
QyAZP6JWD/2Urs0V00k8W10FLci9SoInyQHI6UyCCPG5ZLICiI8jMWqW3Zx4pwurQ0AoDx6QLIjQqWuizyMYIg4De
dI5EcEYS9+RXIK6vD2XIdzpbREBGkxE3doz1q008GIIiIiP2I0W/HV4UJcqNJDhMwrk88usd6zi8l8j3xmgBM7p+I
Kp0JP53X4ueL1ajUmFH14UIMTInA0G5RUpcIgIGiImhv1Bkt+Dz3AspqTVDJZZjUPwFJEUFS10V+IjxIhWE9Y5DRN
QoSeeU4VFCFAwWVKsZYoAH/DNkICiI8g0V0hM+P3QB1QYLgLRy3HL9J8SEqqUui/yQSiHdRt1ikBAwGC3Hi3G2XI
dAs/QrGxmIiIh8XHGI1AV/kXoTebIUUmIkpN3TiajKSXI+4UNhEIPtYEX6plkGd0lfSerjsnojIhxVU6PCfg+ehN1s
RG6rG7wYmMQyRx0iLD0XvhDAAqInLkS1UbrbftAQERH5qJPFNfgi9wLMVhHJEYGY0qATgtUcGCDPMjwBqEKEYrQ
KPxQoJesDgYiIiIf9N05Kmw6WgSbCPSIDcHk67kDNXkmpVyGG6MtKP3yFYzvId32D/xPBSiIHyKKInLOVGBvfgUAo
F+SBSN6xkDmYZvgEV0uXVCd3ynpDUwEBER+QibKGL7LyU4erEaADCKayRu7BzpcTsCE3kiBiIiIh9gsdnwzbFi/F
pSCwHAI0ti0beTRuqyILwGAXERKZczW234+nAhCip0kAsCxbHoUdsqNRLEXkVj55UnZWVBUEQXB7x8fH090VRRFZ
WFhITEXEYGIjhw4fj2LFjLscwGo2Y03cuoq0jERwcjMmTJ+P8+fMdfSpER03CZAM2HLqAggodLHIBk69PZBgiagOP
DkQA0KDPHXQWfjofR44ccb738ssvY+nSpVi+fDn27duH+Ph4jB49GjU1Nc428+bNw4YNG7B+/Xrs2rULtbWlMdhX
qxWqxSnQ0TkNvLgC0wsVqBQa4BaIc0UGzohJdID7oFA5IU8fshMoVC49Ao5iKKI119/Hc888wymTp0KAFizZg3i4u
Lw0Ucf4cEHH4RWq8XKLSvx4YcfYtSoUQCAtWvXIjK5GVu3bsXYsWM79FyIiNylXGdF3IwXUW2WIUglx5Qb0iE6hLf
iIGorj+8h0nXqFBITE9GLSxfcfffd0HPmDAAGLy8PRUVFGDNmJL0tWq3GsGHDShv3bgDagQMHyDabXdokJiYiPT3d
2YaIyNtcrNLjrzvKoYzshCC5iGmDkhmGiK6RR/cQDR48GB988AF69uyJ4uJivPDCCxg6dCi0HTuGoqIiAEBcXJzLZ
+Li4nD27FkAQFFREVQqFSiIhQ0cXy+KUajEUaj0fm8urraHadERHRNLLTp8ft/5qColgpzVRFu7R3JW3EQuYFH9x
CNHz8ed911F/r27YtRo0Zh48aNA0xDYw5X7q8hiuJV99xoSzsLS5ZAo9E4H8nJyW08CyIi9zhfqcPd/9yDggod4oL
lKP5oEYI9+j9ribyHrweiKwUHB6Nv3744deqUc17RLT09JSULzlj+Ph4mEwmVFZWntmmKYSWLYJWq3U+zp0758Yz
ISJqnXMV0kx/JwfnKvRijQrC/42IgrWmV0qyIHyGVUio9GI48ePIyEhAV26dEF8fDy2bNniFN9kMmHnzp0YOnQoA
GDgwIFQKpUubQoLC3H06FFnm6ao1WqEHYw5PIiIpFBQrsPd/8zBhSo9ukQH45MHMhAdxPuSEbmTR3e2Lly4EJMmTU
JKSgpKSkrrwgsvoLq6GjNnzoQgCJg3bx4WL16MHj16oEePHli8eDGCgoIwY8YMAIBGo8Hs2b0xYMECREVFITiYegs
XLnQ0wRERebqz5XX4/T9zcFFrQNeYYHw8ZwjiwgJwUerCiHyMRwei8+fP4/e//z3KysoQEx0DIUOGICnB6mpqQCA
J554Anq9Hg8//DAqKysxePBgbN68GaGhlzYle+2116BQKDBt2jTo9XqMHDkSglevhlz0/7oiIs+WX1ah37+bg0KtA
d3qw1BsWIDUZRH5JI8OR0vXr2/2fUEQKJWvhaysrCbbBAQEYNmyZVi2bJmbqyMiX1JQUICysjKpy3C6WGPBsZvKUA
G3ITLmgaehBOP8rz/Dsc/+8ePHJa2PyNd4dCAiIuoIBUqfK5XL+h10qLLAQaOijsh7u7FIRGwVR6FruXPYNRz1Q
12rac2ERzjiyPyUqEROT3ysrKOnfpcM+TryAupZuktVSBge+LlTDYBiQpbbj+gQEDHy/Qbvje3di05o3DAYJJKiS
yPcweBTR1YtL6YakH0k+6/yWiM2HboAg82K6BAVpt6QhEBV4/Mdiwt0d3B1RL6NgYiIyAMUVxvwaELMFhsiaLRY
8qATghUcvEHUudhICIiktjFKj2+yL0Ik9WG+LAA3HF9IgIYhog6FAMREZGECip0+0qni7DYRHQKD8Tk/olQKbxqz1
win8BAREQkkT0ltfjv0SJYbSJSI4MwoV8CLHKGISIPMBAREUkg91wVvjtZChFat5hgjEuPh0LGMEQkfQYiIqI0ZLW
J+P5UKX46rwUApCeGYXhaL0QyQeLKiPwbAxERUQepMZix6WgRCrX2vYnu6haFgakREASGISKpMRAREbUzURRxsrgW
00+WQm+2QqWQYUzvOHSCLZG6NCKqX0BERNS0KnUmFH+qDHLldQCAMBA1bu8bj/AgLcSVEdHlGiiIiNpBwa0RBwsq8
UthDUQAMG4sXMKBNW05HwhIg/EQERE5AYWqW3F1UZc00rxa0ktSmuMzvc6RwXh5u7RiAprS1ghETWHgYiIqJ4oAl
q9GW1Rmj1ZtQaLLDYRFgvf4gibKIIm02ETQ0sNhtqDRbUmawux5IJQJfoYAxKjUS8JkCiMyKiImIgIiK/ZrLYs0+
iAVETf+C/F5UwnMtv87GCVHikagKRHBmIhrGhTd6YLYg8DwMREfmlkmoDVu30x8d7C1ClMy0kzwgYrPaenegQNCID
lQgNUEIhFyCXXfyQBmHkAmQCIbfswrWfQgNUCBQKecSeiIvxUBERH6lpMaAN789hU/2nYPZKgIAIgJk0Pv9Z5g4Y
QL69r40ct4+g8jvMBARKV/Qm6xYsfM03v3uDPRm+3yf33S0wJxbuiJCfwE3Pv8eYu66nWGIYe8xEBGRTXNfEd8cK8
b/ff0zLlTpAQDXJ4fjqfHXYUjXKADAwYMXpSyRiDwAAxER+awzpbV47stj+P5UGQAGUR0Av0zsJfH8ZzrQ0QuGiI
Iy0foTByS2/Yr3vv+DMxWESq5DA/c2hUPj+iGIBX/b4+IGuL/MxCRz7DZRHx1+CJe3PSL8waqW9Ni8NyKpugSHSxx
dUTkyRiIiMgn7D5dhiX//QVHLmgBAEKrgXhuUh+M6hXL4TEiuioGIiIyaieLa/Dipl+w7ZcSAECIWoEHb+2K0bd2R
YCSGyMSUcswEBGRVzp6QYU3dvyKTUeLIiAQiZgxuAUPDayB6J5zzAiaiiUGiIlyGqIo4se8Cvxj+6/0lWMAMK5PPJ
4Yl4auMSUESVBK43oyBiIgh8nsFsxZc/XcTanLM4fN4+R0guEzCpXwL+NlW70uJDJa6LlWdAXEReay5XVym3MwN+4
/D63eDABQKWt43cAkPHrN6REBUlCRH5CgYiInK7goICLJWVXb1hI2qMNUw+p8d3BXocLzM7X48JkmNscYCM7BII
TYAZZWd/QdLZ99R7/Phx9xyIiLwWAXERuVVBQGu69ULep2uxZ+RBWkQ2PkGBKXdhMBugyDILQAaUbTbcOYgag5+j
bN5B7Fft0Fv7VU4gNra2nY80hF5MgYiInKrsrIy6HU63PPkK4hL6dZoG4sNqDIJKDbIUGQQUGVyyaFquNKG5GAbko
NsCEztB4zo1641H9+7E5vWvAGDwdCu30NEnouBiIjaRVxKNyR2641aowVavRnldSaUVBtQumNERZ0J4hXtY0LV6Bw
VhLS4UER18LL54oLTHfp9ROR5GiiIqNwsNhEvDsaU1hhRVmt/OP5+sqAKsdNfQPZFJfTnfoXtyuRTL0glR1JEIFKj
gpEaGYRgNf/viIikw/8HivITNpuI0pMFdUYrao0W1Bktzud1Rsul14wW1Bqt0Jkuf63+MyYLaG0WV0pMTQYdAAjsf
D3qLPa/ywUBYYEKhaepEBuqtj/CAhDCAEREHoT/j0Tk4ZpbsWYyiiiips6ColoriWitKdFZUG22oNV161JLFGCz2hz
sJAMLUMoQHyKAJkCFcLUN4gBym6jKsfW8Fpt43F9179ECiWsf7iRGRx2MgIvJgZ8+eRe8BN8Ki0kARKQBFeDyU4fY
/FeHxkIdGQRbkVz/QZUSbFTaThqJJV/+nv5P8gvrL94zNGhr1VXBpqsGRFuT3xNomYXQA0W1/giIiDoEAXGRxKoN
ZhRWGXBRq0dhLQEFFTqcc9DhbEUdzpTUIGb0+81+XiGICFaICFYAwQoRarkILQxQyex/KmWAQIZCKQAKAZAJgCCoA
KgAhLv9fLhii4i8EQMR+S2L1YY6oxU1RjNqjfa5MTX1f17+vM5ogcVqg1UUYbXZ5+JYRRE2mwib2HAY6vLhocsHik
QAdUYLagwWVBvMqDFYUFFnQq3RctVaA+QiIKMCoQLSQHpo+ghUyjlqSIortoJIG/LVIHrrrbfwyiuvoLCwEH369MH
rr7+0W265RdKaThTVoNZogVohglohQ0yoGppApUf9gvNUBrMVVTozKnUmV0pM00rMqNSZUW0w00NNjcGCWq05/k8L
Kmv1qDFYoDeLMFrd06fmWoSoBEQHyREVKEddsBzxI0rEBcuhKzmLhQ/diz+/8TGSevSUukwiIp/LN4Hok08+wbx58
/DWW2/hpptuwjvvvIPx48fj559/RkpKlmjRl1dLd0HDt0LLK8FqCUIUETiPiwAHSKCETXmB0jQ5G15gQpEYFQa2Q5S1
St+zh6Z+pMLvrVTFbo6Lc66UzW+tVPLvrAY0aVzuQMP1q9/U+Duen5K60hWkywGetgM+phm+kGnWmXSwGXW5S7
YrIDNBog2+9/F+r+LinB5L5FLkG0YakWzof676mAzm1FMqIG1pgyi2dhsjdxBmYiofflNIFq6dCLmz56N+++/HwDw
+uuv45tvvsGKFSuwZMKSyeqKcVEjMUwFg9kCo0W0rwy25BXVoe8sroG7WWC/Z50nUIVSAxVoF0oHHEHCoQH2Ff7h
KpkkMvc27tkYkwwUjXo61cq6S0iqnVGAWF87L9FZMN+stWN0kttiveF6E3219zU5aBTABCVDKEggT7n2oZgpUyBC
mF+ocMQQoBgUoZyov045XF/4dx9zyIuMQk+5waGSAXACC4/uFZOB+HiKhj+EUgMplM0HDGaj566imX18eMGYPdu3d

LVJXd3MER+Mesoc77PgkKFeQhkZCHRkMRGm1fTRTZCcrITlBGJgHqIBTXWVFcZ8XBooa9CqLNCpu+2t67YtBCzjZA
tBghWswN2joIcgUEhQqCQg1BWf+nOgWZQgVBqXbeV6o9iFbZpRV05stXNdLXM9kMtBAZamDT18Cqr3H+3aavh1VfA
9HU8vtl0cRFhu06Xn3a4Wzcj/NxiIg6hl8EorKyMlitVsTFxbm8HhcXh6KiokY/YzQaYTReChxarRYAUf1d7dba8v
PzodfpM0J3sxEEK9BMywqIpgqYTQoYhQAYBBX0ghpGQUjVLAISlggBwQBgkINucI9tz4QLeZLYUoUIYcNotkAY20
lggKDoVYrIIcNclGEDFbIYIMcNshEq/112CAT6/+sf8jr37M/rx9ukgFQ1z8A2Iebguofsw4514KTR3Bg6xfI/+Uw
lPLWLWXiiMQFeWfXongIImraRnW3DFYc8dgr2j9HweAPv0AHf/nnUcT2xkEYwL0Q9cuHBBBCDu3r3b5fUXXnhBT
EtLa/Qzzz33nAj7wiA++OCDDz744MPLH+fOnWs2K/hFD1F0dDTkcndM3qCSkpIGvUY0ixYtwvz5853PbTYbKioqEB
UV5dYVYNXV1UhoTsa5c+cQFhbmtuN6El8/R56f9/P1c/T18wN8/xx5fm0niiJqamqQmJjYbDu/CEQqlQoDBw7Elil
bMGXKF0frW7ZswR133NHoZ9RqNdRq12Gn8PDwdqsxLCzMJ/+RX87Xz5Hn5/18/Rx9/fwA3z9HnL/baDSaq7bxi0AE
APPnz0dmZiYGDReJiWm/P0f/0RBQQEeeughqUsjIiIiiflNIJo+fTrKy8vxxv//7vygsLER6ejr++9//IjU1VerSi
IiISGJ+E4gA40GHH8bDDz8sdRku1Go1nnvuuQbDc77E18+R5+f9fP0cff38AN8/R55f+xNE8Wrr0IiIiIh8m3dsxk
JERETUjhiIiIiY08xEBEREZHfYyAiIiIiv8dA1M6+++47TJo0CYmJiRAEAZ9//vLPV7Nz504MHDgQAQEB6Nq1K95
+++32L7SNWnt+03bsgCAIDR6//PJLxxTcSkuWLMFvfvMbhIaGiJY2FnfeeSd0nDhx1c95yzVsy/l52zVcsWIF+vXr
59zwLSMjA5s2bWr2M95y/YDwn5+3Xb8rLVmyBIIgYN68ec2286ZreLmWnJ+3Xc0srKwGtcBhXzf7GSmuHwNR06urq
0P//v2xfPnyFrXPY8vD7bfffJltuuQWHDh3C008/jcceeWz/+c9/2rnStmnt+Tmc0HEChYWFzkePHj3aqcJrs3PnTj
zyyCPIycnBlilbYLFYMGbMGNTV1TX5GW+6hm05PdwvYzJSUL48cUXsX//fuzfvx+33XYb7rjjDhw7dqzR9t50/YD
Wn5+Dtly/y+3btw//0c/0a9fv2bbedsldGjp+TL40zXs06PS61Hjhxpsq1k1889t0+llgAgbtiwodk2TzzxHjd
dde5vPbggW+KQ4YMacfK3KML57d9+3YRgFhZwdkhNlbSumJCEDcuXNnk228+Rq25Py8/RqKoihGRESI7733XgPve
fP1c2ju/Lz1+tXU1Ig9evQQt2zZig4bNkx8/PHM2zrjdewNefnbdfwueeeE/v379/i9LJdP/YQeZg9e/ZgzJgxLq
+NHTsw+/fvh9lslqgg97vhhhuQkJCAKSNHYvv27VKX02JarRYAEBkZ2WQbb76GLTk/B2+8hlarFevXr0ddXR0yMjI
abePN168l5+fgbdfvkUcewYQJEzBq1KirtvXGa9ia83Pwpm46tQpJCYmokuXLrj77rtx5syZJttKdf38aqdqb1BU
VIS4uDiX1+Li4mCxFBFWVoaEhASJKn0PhIQE/P0f/8TAqQNHnBrx4YcfYuTIkdixYwduvfvWqctrliiKmD9/Pm6++
Wakp6c32c5br2FLz88br+GRI0eQkZEBg8GAKJAQbNiwAb179260rTdev9acnzdev/Xr1+PgWYPYt29fi9p72zVs7f
l52zUcPHgwPvjgA/Ts2RPFxcV44YUXMHToUBw7dgrUVEN2kt1/RiIPJAGC7PxfRnXK983RulpaUHL53N+TwjIwP
nzp3D3//+d4/8H/LlHn30URw+fBi7du26altvvIYtPT9vvIZpaWnIzc1FVVUV/v0f/2DmzJnYuXNnk6HB265fa87P
267fuXPn8Pjjj2Pz5s0ICAho8ee85Rq25fy87Rq0Hz/+fe+ffsiYMD3bp1w5o1azB//vxGPYPF9e0QmYeJj49HU
VGRy2slJSVQKBSNJmlfMGTIEJw6dUrQmpo1d+5cfPnl19i+fTuSkpKabeuN17A159cYT7+GKpUK3bt3x6BBg7BkyR
L0798fb7zxRqNtvfH6teb8GuPJ1+/AgQMokSnBwIEDoVAooFAosHPnTrz55ptQKBSwwq0NPuNN17At59cYT76GVwo
ODkbfvN2brFeq68ceIg+TkZGBr776yuW1zZs3Y9CgQVAqlRJV1b40HTrkcv3YDqIoYu7cudiwYQN27NiBL26XPuz
3nQN23J+jfHka9gYURRHnBobfc+brl9Tmju/xnjy9Rs5cmSDFUn33nsrvrvu0jz55J0Qy+UNPuNN17At59cYT76GV
zIajTh+/DhuueWwRt+X7Pq165RtEmtqasRDhw6Jhw4dEgGIS5cuFQ8d0iSePxtWFEVRf0qpp8TMzExn+zNnzohBQU
Hin//8Z/Hnn38WV65cK5QSVhF//63VKfQrNae32uvvSzu2LBPHPhypHj06FHxqaeeEgGI//nPF6Q6hWb96U9/EjU
ajbhjxw6xsLDQ+dDpdM423nW23J+3nYNFy1aJH733XdiXl6eePjwYfHpp58WZTKZuHnzZLEUvfv6iWLrz8/brl9j
rlyF5e3X8EpX0z9vu4YLFiWQd+zYIZ45c0bMyckRJ06cKIAghor5+fmiKhr09WMgame05ZFXPmbOnCmKoiJOnDlTH
DZsmMtnduzYId5www2iSqUS03fuLK5YsaLjC2+h1p7fSy+9JHbr1k0MCAgQIyIixJtvtlncuHGjNMW3QGPNBkbtW
qVs403X802nJ+3XcP77rtPTE1NFVUqlRgTEy00HDnSGRZE0buvnyi2/vy87fo15srA403X8EpX0z9vu4bTp08XEXI
SRKVSksYmJopTp04Vjx075nzfU66fIIR1M5WiIiI/BQnVRMREZHfYyAiIiIiv8dARERERH6PgYiIiIj8HgMRERER
+T0GIiIiIvJ7DERERETk9xiIiIjq5efnQxAE50bmSl0KEXUwBiIi8jqzZs2CIAgQBAEKHqIPkSn405/+hMrKylyd4
84773R5LTk5GYWFhUPT3dzxUTk6RiIiMgrjRs3DoWFhcjPz8d7772Hr776Cg8//PA1HVMuLyM+Ph4KBe97TeRvGI
iIyCup1WrEx8cjKSKJY8aMwfTp07F582YAgNVqxezZs9GLSxcEBgYiLS0Nb7zxhv0zWVlZWLNmDb744gtnt900HTs
aDjnt2LEDgiDg22+/xaBBgxAUFIsh04fixIkTLrW88MILiI2NRWhoK06//3489dRTuP766zvqR0FEbsBARERe78yZ
M8j0zoZsQQQA2Gw2JCUl4dNPP8XPP/+MZ599Fk8//TQ+/fRTAMDChQsxbdo0Zy9TYWEhhg4d2uTnxn3mGb266qvYv
38/FAoF7rvvPud769atw9/+9je89NJL0HDgAFJSURBixYr2PWEicjv2Cx0RV/r6668REhICq9UKg8EAAFi6dCkAQK
lU4vnnn3e27dKlC3bv3o1PP/0U06ZNQ0hICAIDA2E0GhEfH3/V7/rb3/6GYc0GAQCeeuopTJgWAQaDAQEBAVi2bBl
mz56Ne++9FwDw7LPPYvPmzaitrXX3KRNRO2IPERF5PREjRiA3Nxc//vgj5s6di7Fjx2Lu3Ln0999++20MGjQIMTE
CAKJwbvvvouCgoI2fVe/fv2cf09ISAAALJSUAAB0nIBG2+80aX9lc+JyPMxEBGRVwo0Dkb37t3Rr18/vPnmzAaj
c5eoU8//RR//v0fcd9992Hz53Izc3FvffeC5PJ1KbvcgzFAYAGCADsw3JXvuYgimKbvoeIPMNAREQ+4bnnsPf//
53XLx4Ed9//zGDh2Khx9+GdfccA06d++006dPu7RXqVSWwq3X/L1paWnYu3evy2v79++/5uMSUcdiICIinzB8+HD
06dMHixcvRvfU3bF//35888030HnyJP76179i3759Lu07d+6Mw4cP48SJEygrK4PZBg7T986d0xcrV67EmjVrc0rU
Kbzwgws4fPhwg14jIvJsDERE5DPmz5+Pd999F3feeSemTp2K6d0nY/DgwSgvL2+wR9Gc0X0QlPbmGf0ww8/t0k77
7nnHixatAgLFy7EgAEDKJeXhlmzZiEgIMAdp0REHUQ00dNR0Rwo0ePRnx8PD788E0pSyGiFuKyeyKia6DT6dD22
9j7NixkMvl+Pjjj7F161Zs2bJF6tKIqBXyQ0REdA30ej0mTzQegwcPwmG0Ii0tDX/5y18wdepUqUsj0lZgICiIiIk
/x0nVRERE5PcYiIiIiMjvMRARERGR32MgIiIiIr/HQERERER+j4GIiIiI/B4DERERefk9BiIiIiLyewxERERE5Pf+
H1Ih6kFtRAB3AAAAAE1FTkSuQmCC",

"text/plain": [

"<Figure size 640x480 with 1 Axes>"

]

},

"metadata": {},

"output_type": "display_data"

}

],

"source": [

"sns.histplot(df3['Rating'], bins=10, kde=True)\n",

"plt.title('Distribution of App Ratings')\n",

"plt.xlabel('Rating')\n",

"plt.ylabel('Frequency')\n",


```
"plt.show()"
}],
{
  "cell_type": "code",
  "execution_count": 80,
  "id": "8aac1c85-7264-4ec8-8eec-477543e8c281",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "image/png":
        "iVBORw0KGgoAAAANSUhEUgAAAYUAAAGZCAYAAABmNy2oAAAAOXRFWHRTb2Z0d2FyZQBNYXRwbG90bGliIHZlcnNp
        b24zLjguMCwgHR0cHM6Ly9tYXRwbG90bGliLm9yZy81sbWRAAAACXBIWXMAAA9hAAAPYQGoP6dpAAA8GULIEQVR4n
        O3dd3hUVf4G8Hd6KmmkA6H3DoIEFJAmBBQVC6iAiCuI6lpYRVx+rMjKurt2QXGXoIiwUHR6UVA6YQSSEJJK0m9Tz
        u/P2JGUkkgyZL75/08zzyQyZ2Z70ySeed77rnnaoQQAkRERAC0sgsgIiLnwVAgIiIHhgIRETkWFiIyIGhQEREDgw
        FIiJyYCgQEYEDQ4GIiBwYCKRE5MBQqMHKL5uh0WiqvMyePVt2eY2i4vP28fHBkCFDsHHjxjrfV9nrefHixetu02TI
        EAwZMqTW922xWBASEgKNR0Nvv/22zrU1tp07d5Z7XY1GIwIDAzFw4EC88sorSEhIqHSburx+13r99dexdu3a0t2mq
        scaMmQIunbtWqf7uZ5Nmzbh73//e5Xfa9myJaZ0Nvqvj0fXx1CohRUrVmD//v3lLs8884zsshrNhAkTsH//fuzdux
        eLFy9GcnIyxo0bV+dgIqKwv79+xEaGlrVNW7YsAEpKSkAgGXLltX7/TeU119/Hfv378e0HTuwbNkyDBkyBMuXL0e
        nTp3w+eeFl9v2RL+/GwmFhvxZXWvTpk149dVXq/ze999/j3nz5jXo41NletkFKEHXrl3Rt2/fWm1rsVig0Wig16vn
        pQ00Dsatt94KAIiMjMSAAQPQtm1bvPP004iKiqr1/QQGBiIwMLBBaly2bBmMRiMGDx6MzZs34/Lly2jWrFmDPFZ9a
        teune01BYC77roLL7zwAoYPH46pU6eie/fu6NatG4CGff3KFBUVwc3NrVEe63p69eol9fFdFTuFm1A2BLBq1Sg88M
        ILCA8Ph8lkQnx8PABg69atGDZsGJo0aQIPDw8MHDgQ27Ztq3Q/cXFxmDRpEoKCGmAymdCpUyCsXrz4uo/fqlcv3Hb
        bbZWut9lsCA8Px7333uu47sMPP0SPHj3g5eUfB29vd0zYEXPNzr2h592mTRsEBgY6hj2bNmCu+++G82aNY0bmXva
        tm2LJ598Eunp6eVuV9WQHbAC//rXvxAREQE3Nzf07t0bP/74Y53quXr1Kn766SeMGzc0f/3rX2G327Fy5cpK202d0
        hVeXl44deoUhg0bBk9PTwQGBuLpp59GYWFhuW01Gg2efvppLF26F03bt4fJZELnzp2xevXqctsVFhZi9uzZaNWqFd
        zc30Dv74++ffviyy+/rNNzuJa/vz+WLl0Kq9WKt99+23F9Va/f0aNHMXbsWmfVtlhYGKKionD58mXH8ygoKMann3z
        iGKoqG5Yru7/Nmzdj2rRpCAwMhIEH0pKSmocqtqzZw9uvfVWuLu7Izw8HPPmzYPNZnN8v+ZvYuf0neVud/HiRWg0
        GsfPZurUqY7f82uH0soes6rho8TERDzyyCPL/befPNN2032So/zn//8B2+99RZatWoFLy8vDBGwAL/++msdfhKuS
        T0fZxuQ2Wad1Wotd92lncDLL7+MAQMG4KOPPoJwqVQUBA+++wzTJ48GXffftC++eQTGAwGLF26FKNGjclPP/+MYC
        OGA0B0nz6NyMhItGjRAM+++SZCQKLW888/45lnnkF6ejrmz59fbv2PPfYY/vKXvyAuLg7t2rVzL9582ZcvXoVjz3
        2GABg9erVe0qpp/DnPr/8Z//nPF6DVahEfH4/Tp0/f00uRLZWfjIwMx20e03c0AwYmWPTp0+Hj440LFy/irbfewqBB
        g3DixAkYDIzq7+vVV1/Fq6++iscffxwTJkzApUuX8MQTT8Bms6FDhw6lqmflyPwW2WyYNm0ahg8fjoiICCxfvhyvv
        PIKNBpNuW0tFgvGjBmDJ598EnPmzMG+ffuwC0FCJCQkYP369eW2/eGH7Bjxw4sWLAAnp6eWLJkCSZ0nAi9Xo8JEy
        YAAJ5//nmsWrUKCxcuRK9evVBQUICTJ08iIy0jLi9pJbfcggtCQ00xe/fuarcpcKcAiBEj0KpVKyxeVbJbWcFITk7
        GjH07kJeXBWdYv38/7rjJdgwd0tQxFN0kSZNy9zNt2jRERUVh1apVKCgoqPHnLZycjIceeghz5szBggULsHHjRixc
        uBBZWVn44IMP6vQc582bh4KCAnz77bfYv3+/4/rqhQzS0tIQGRkJs9mM1157DS1btsSGDRswe/ZsnDt3DkuWLCm3/
        eLFi9GxY0e88847jScbM2YMLly4AB8fnzrV6lIEVWvFihUCQJUXi8UiduzYIQCI22+/vdztCgoKhL+/vxg3bly562
        02m+jRo4fo16+f47pRo0aJZs2aiZycnHLbPv3008LNzU1kZmZWw196erowGo1i7ty55a5/4IEHRHBwSLBYL1778vX
        1vaHXAIB46qmnhMvIEWazWcTeXIjRo0cLAGLx4sWvtrfb7cJisYiEhAQBQKx8t87xvbLX88KFC0IIbKys0Sbm5u4
        5557yt3H3r17BQAXePDg69Znt9tF27ZtRXh4uLBarUIIebPny8AiG3btpXbdsqUKQKAepfdd8td/49//EMAEL/88
        ku55+3u7i6Sk5Md1lmtVtGxY0fRtm1bx3Vdu3YV48ePv26dFZX97nzzzTfVbt0/f3/h7u7u+Lri63fo0CEBQKxdu7
        bGx/L09BRTpkypdH3Z/U2ePLna75U9lhBCDB48uNLPVAgHnnjiCaHVakVCQkK557Zjx45y2124cEEAECTwRHBcN2v
        WLFHd21BERES5uufMmSMAiN9++63cdjNnzHqajUacPXu230N069bN8TshhBAHDhwQAMSXX35Z5eNRKQ4f1cKnn36K
        gwcPlrtc2yncd9995bbft28fMjMzMWXKFFitVsfFbrfjzjvvxMGDB1FQUIDi4mJs27YN99xzDzw8PMpt02bMGBQXF
        9fy7gYEBGDcuHH45JNPH01zVlYw1q1bh8MTJztq7NevH7KzszFx4kS5W7eu0RD09SxZsgQGwGfGoxGdOnJCvn37sG
        DBAjz11FMAgntUHVMyJMQPNmzeHXq+HwWbAREQEACAmJqba+92/fz+Ks4vX8MMPL7s+MjLScfvr2bVgF+Lj4ZfLyHT
        odDoApr2URqPB8uXLq7XNxcebNGKSAGDHjh3lrh82bBiCg4MdX+t00jz44I0Ij493DM/069cPP/74I+bMmY0d03ei
        qKioVnXXhrj0qU7atm0LPz8/vPTSS/joo49uuP0r+Ptbe29vb9x1113lrps0aRLsdnuNXU192L590zp37ox+/fqVu
        37q1KkQqMd79u3lro+KinL8TgBA9+7dAaDKmV30B4ZCLXTq1A19+/Ytd7lWxXa3bBbMhAkTYDAYyl3eeOMNCCGQmZ
        mJjIwMWK1WvP/++5W2GzNmDABc9w182rRpuHLlCrZs2QIA+PLLL1FSULJuLPbRRx/F8uXLkZCQgPvuuv9BQUHo37+
        /4zbX88ADD+DgwYM4d0gQzp49i4yMDMdQhN1ux8iRI7FmzRq8+0KL2LZtGw4c00AIs5reJMuGWEJCQip9r6rrqlI2
        0+iee+5BdnY2sr0z4ePjg0GDBuG7775DdnZ2ue31ej0CAGkqfKyKQz411VW27XvvvYeXxnoJa9euxdChQ+Hv74/x4
        8cjLi6uVvXXJDExEWFhYdV+38fHB7t27ULPnj0xd+5cd0nSBWFhYZg/fz4sFkutH6cuM4yuDcky1b1+9S0jI6PKWs
        teo4qPX/HnbDKZANT800ncp1AvKo5bN23aFADw/vvvL5tZcq3g4GBYrVbodDo8+uijMDVrVpXbtWrVqsbbHHjVqFML
        CwrBixQqMGjUKK1asQP/+dG5c+dy2z322GN47LHHUFbQgN27d2P+/PkY03YsYmNjr/upDAwsNrZVydPnsTx48ex
        cuVKTJkyxXF92c72mpT90SYnJ1f6XnJyMlq2bFnj7XNycvDdd98BKB2Dr8oXX3zh6GgAwGq1IiMjo9wbRtnjV3wTq
        a6ua7f19PR07BdJSULxdA3jxo3DmTNnaqy/Jgc0HEBycjIef/zxGrfr1q0bVq9eDSEEq0jsXLlSixYsADu7u6YM2
        d0rR6r4u9vTco+8Fyr4mvi5uYGACgPKSm3XV071IoCAGkQLJRU6fqrV68C+0PvjM4004UGMHDgQPj6+uL06d0V0oy
        yi9FohIEHB4Y0HYqjR4+ie/fuVW5X8Y2qorJQWbt2Lfbs2YNDhw5h2rRp1W7v6emJ0aNH45VXXoH2BMapU6du6rmw
        vaGUfQors3T0puve9tZbb4Wbm1ul+fj79u2rVvY/xRdfoKioCK+99hp27NhR6dK0adMqh5AqPt4XX3wBAJU01tu2b
        Vu5N0GbZyavvvoKbdq0qXK6a3BwMKZ0NqYqJYfyi7NmzLWY01VZmZjGbg8GA5557rla30Wg06NGjB95++234+v
        riyJEjju+ZTKZ6+3ScL5eHH374odx1X3zxBbRaLW6//XYAcIR5dHR0ue0q3q6sNqB2n96HdRuG06dPL3tuQ0nwrka
        jwdChQ2v9PKh67BQagJexF95//31MmTIFmZmZmDbhAoKCgPCWlobjx48jLS0NH374IQDg3XffxaBBg3Dbbbdh5syZ
        aNmyJfLy8hAfH4/169dXGietyrRp0/DGG29g0qRJcHd3x4MPPLju+0888QTc3d0xc0BAhIaGIjk5GYsWLKYPj0+1n
        7Brq2PHjmjTpg3mzJKDIQT8/f2xfv36Wg1N+fn5Yfbs2Vi4cCGmT5+0+++H5cuXcLf//73Wg0fLVu2zHEfZZ90rz
```


V58mS89dZb0H780HR06AEAMBqNePPNN5Gfn49bbrnFMfto90jRGDRoULnbN23aFHfccQfmzZvnmH105syZctNS+/f
vj7Fjx6J79+7w8/NDTEwMVq1ahQEDBsDDw+06zyEuLg6//vor7HY7MjIy8Nttv2HZsmXIzc3Fp59+ii5duLR72wOb
NmDJKiUYP348WrduDSEElqxZg+zsbIwYMcKxXbdu3bBz506sX78eoaGh8Pb2rvXMrooCAgIwc+ZMJCYmon379ti0a
RP++9//YubMmWjRogWA0uGk4c0HY9GiRfDz80NERAS2bduGNWvWVLq/smMw3nj jDYwePRO6nQ7du3eH0Wist01zzz
2HTz/9FFFRUViWYAEiIiKwceNGLFmyBDNnzkt79u1v6DLRBTl3cju7shkYBw8erPL715tBsmvXLhEVFSX8/f2FwWA
Q4eHhIioqqtL2Fy5cENomTRPh4eHCYDCIwMBAERKZKRYuXFj rWiMjIwUA8fDDD1f63ieffCKGDh0qgo0DhdFoFGFh
YeKBBx4Q0dHR171fAGLWrFk1bnP69GkxYsQI4e3tLfz8/MT9998vEhMTBQAx/f58x3ZVzWix2+1i0aJFonnz5sJoN
Iru3bul9evXi8GDB9c4++j48eMCGHj22Wer3ebMmTMCgPjzn/8shCidfeTp6Smio6PFkCFDhLu7u/D39xczZ84U+f
n5VT7vJUuWiDZt2giDwSA6duwoPv/883LbzZkzR/Tt21f4+fkJk8kkWrduLZ577jmRnp5e42tW9rtTdtHr9SgIEA
MGDBAzJ07V1y8eLHsbSq+fmfOnBETJ04Ubdq0Ee7u7sLHx0f069dPrFy5stztjh07JgY0HCg8PDzKzeqq6fe7utlH
Xbp0ETt37hR9+/YVJpNjHiaGirLz5zpmupVJSkoSEyZMEP7+/sLHx0c88sgj jtlS184+KikpEdOnTxeBgYFCo9GUE
8yKs4+EECIhIUfMmjRJBAQECIPBIDp06CD+/e9/C5vN5timbPbRv//970rPq+LvJFwMeEi6UxyIVGLq1Kn49ttvkZ
+ff91tNRoNZs2aVee590RKx30KRETkwFagIiIHd8REZED0uIInJgKBARKQNDgYiIHBgKRETkwFagIiIHhgIRETk
wFIiIyIGHQEREDgwFIiJyYcGQEZEDQ4GIiBwYcKRE5MBQICiIb4YCERE5MBSiIiMiBoUBERA4MBSiicmAoEBGRA00B
iIgcGAPER0TAUCAiIgeGAHER0TAUiIjIgaFAREQ0DAUiInJgKBAPxJILS9CqVsu4ubmhT58+2Lnnj+ySSIUYCkQK8
NVXX+HZZ5/FK6+8gqNHj+K2227D6NGjkZiYKLs0UhmNEELILOKIata/f3/07t0bH374oe06Tp06Yfz48Vi0aJHEyk
ht2CkQ0Tmz2YzDhw9j5MiR5a4f0XIk9u3bJ6kqUiuGAPGTS09Ph81mQ3BwcLnrg40DkZyclKkqUiuGAPfCaDSac18
LISpdR3SzGAPETq5p06b06XSvuoLU1NRK30PRzWIoEDk5o9GIPn36YMuWLeWu37JlCyIjIyVVRWql10AEV3f888/
j0cfrR9+/bFgAED8PHHHyMxMREzZsyQXRqpDE0BSAEefPBBZGRkYMGCBuHKSXLrL2xadMmREREyC6NVIbHKRARK
QP3KRARKQNDgYiIHBgKRETkwFagIiIHj4iVSq22JCWV4L0/BKk55sd/88vscJis8NmF7DaBwW2AZsQ6GjKxHTrak
CjBbTa0n/1boCpCeDwPpy/Zf938wG8ggGtTvbTJao3DAVSNTCypxJzKNSdpHjzT4tvwTpeebS/+eVIK/EWqf7vDs
4FchZXfdiNDraOWTwaVZ6aRI0+DT//etwW181YPku+/0SScJQIKdlsdkRn5qPmKtC3y95iEnKRUaBWxZpfxA2IPdK
6eXSb1Vv49MCC04MBHUGgruU/tu0HaAZNG6tRLXAUCcnkFVGkRkSLk7/folJys051HyYbXbZpd28nMTSS+xpflnM
wIB7YCQrkb4X6D5LUBwN0DHP0mSi7+BJEV0oQV74t0w0zYNe+MzcCW7SHZJjctmBLJPLV6ivyq9zuAJhPcGIiKbiI
FA836AwVluneRyGARUKOx2geOXs7ErNg27YtMQfTKHNjsPpi/HUGbC3FN6AUq7ibDeQnThQPtRQGgPufwRS+AyF9R
gUn0LsT02tBv4JT4d2YUW2SVV6+7gVLYb86zsMmrWJBxoNwJoPxpPZhdBDUIDgPUB4QQ0HAhE9vPpGjXbBr0J0fJ
LklDcq8Ah1eWxvTuQKvbSzuITuMAryDZ1ZFKsF0gmxaXkoc1R69g3dEruJpTLLucG6KITqE6Gh3QegjQ4yGg41jA6
CG7ILIdwgp0Q9LYsVDD8av4/uhlnLySK7sclyZswLltpRejV2kw9HgQaDwk9EA8ojpgKfCt2e0Cu2LT8MWBROw4kw
ordxQ7H3M+EL2690IdCnS9D+g9GQjsILsyUgg0H9F1JeuU4auDL/DNocuqnTqq60Gj2mg9B0g/A2g3it0D1YidAlV
rX3w6lu+9gB1n0zh9V0n07yy9+LUEbnkC6P1o6dpNRBwU6BKdp5Nxfvb43E4IUt2KY1G9Z1CRQbP0h3T/Z/k0BKV
w06BHLaeTSH72+Nw/HK07FKooVkkGEPLeSi/7tWufxFLkd2VeQEGaOugiBn04m4/3t8TidxFLElin2p9JL66EQg
1+CJmKa7IpiIoaCi7LbBdZHX8XiHfGITcmXXQ45g/M7cMLSDP8SWSgae1QE9m/vKrogkYCi4GKvNjrxHrmLJjnicTy
+QXQ45EWHwAtXhyCuIB2jXkdjeKdgvDCyPtqFdgJuihoILWxfScT7chIvEzELZpZAT0hFyH+Li/LhPaWtMCra
dSUFUt1A8P6I9Wgd6Say0GgtDwQXEp+bj/9adXL5zGbJLISclDB6YfXVI5esFsCE6CT+dTMbUyJZ4fmR7eBj5tqFm
PIpFyYrMNRzx0xmMfnc3A4FqdCLkXsQWVL/qqTuu8L9fLmD4m7vw86nkRqyMGhsjX6V+PpWMBetPq/YIZKo/pV3C0
FptezWnGE+u0ozhnYlx6tldE07L5bvVhqGgMpcyCzH/h1PYfiZVdimkECdC7kVsXN3e3LfGpGdfuXT8ZVg7PD6oFf
Q6DjjoBUNBJUqsNny08zyW7IxHiVUF5zWmRiH07rXuEioqNNuw6Mcz+P7oFfzjnm7oE+FXz9WRDIX3FdgVm4ZRb+/
G21tjGQhUJydDa96XUBtnkvMw4a9eHlNNHKc+0x6VDvsFBQsp9CCV9aewIboJNmlkAIJvTteuHpH/dyXAL48cAlb
Tqdg7ph0uLd3s3q5X2p87BQU6nBCFsa8t4eBQDesPrqEitLzzXj+6+0YtvIgsVn9Xrf1DgYcgojhMCSnfF4c0L+z
iyiG1afXUJvtp9JxZh397jUsrtqwVBQKPT8EkxZcRD/+uksz3pGN6UhuoSKruYU48GL+/Hx7nPgCv3KwVBQiH3x6R
jz7h7sjk2TXQopnNC7469JNzbjQK6sdoHXN53BE58e4k5ohWAO0DmbXeDnZwFxyLLfkJpXIrsCuoGToffiTL5Hoz7
m1phUjHlvd44mcjjJ2TEUnFhyTjEmfvwr3t8eD44WUX1ozC6hoivZRXhg6X78b895KY9PtcnQcFLbYlIw+t3d0HAx
U3YppCIyuoRrWwCCzfGLA4nFXE4yRkxFJyMEAL//PEMHv/kELI4Bkv1SGaXUNGW0ymIem8PjL/Kl10KVcBQCCLFF
hue+vwIPtp1TnYppEKnu+R2iVUDmrCPd/tB/fH70suxS6Bo9odhLp+SWY/skh0MnJ2oAQu+G2UkNd1zCjTLb7H
j+6+PIyDdj+m2tZzDDYKfgFOJT83HPkr0MBGowpyTvS6iJEMDCjTF4fVMMj2dwAgwFyX49n4H7PtyHS5k80pkahrN
2CRV9vps8Xvj60Kw2LuooE0NBop90JmHy8g0chUEN6rQTdWkVrTL6BdM/PYRCs1V2KS6LoSDJ6g0JmPXFUZI51DU1
IKV0CdfaeTYnk/77G7IkuKcDawFCRbviMecNSdg4xgP1MB0h96DGIV0Cdc6dikbE7ax0UfJWAoNCiHBasP41//
3xWdinkAkq7hGGyy7Hh59TKCeN+SftibnCe7FJfCUGkQgi89F00lu+9ILsUchFK7RKuLXbjPs/2oeDPLK/0TAUGs
mCDafx9SEepEONq+ldwrVy6145H+/YW98uuxSXAJDORg8szUWK/ZelF0GuZAYFXQJ1yqx2vHEp4d40p5GwFB0Ymt
/uYB3tsbJLoNciNC74a/JyppxVBuFZhseW3EAJ6/kyC5F1RgKDeibQ5fw2sbTsssgFXTeg905XnKLqNB5BZbMWX5
AcSncudzQ2EoNJCfTiZjzpoT4FH71JjU2iVcK6PAjEf+dwCXMGtll6JKDIUG8Etc0p5ZfZTHIVCjU30XcK3k3GI8s
uw3p0fzbIT1jaFQz44kZuFPqw7xSGVqdEJnUn2XcK2EjEJMW3mQ52LUM4ZCPTqTnIvHVhxEodkmuxRyQwFCXKNLuF
b05RzM/0wIF9GrRwyFenIxxQCPLuPidISH0Jkw01kdxYU1a7YNLz03QnZZagGQ6Ee5BRZMGXFAaTlcXyT5HDFLuF
a3x25jH/9dEZ2GarAULhJQgg8/9UxJGRWJgTJ4cpdwrW7DyHNUe4asDNYijcpA+2x2PbmVTZZZALc/Uu4Vqvfh+S
C+jdJIbCTdgd4a3t8bKLoNcmNCZ8CK7BIciw0zPz+MghL0SLpRDIUbdCW7CH9ZFqR8FIFk0hs2HifYJZRzPq0AL
30XLbsMxdLLLkCJSqw2PPXZYWQVcqarMrV8Jw8J0ZVT/6m+Biy0cq/xtnsTrRi8shBdg7Q4NsPLcf2Wc1bM2LSMLA
I7xnc04L/j3GDUaQAA0cUct/y3AFsne6CFz/U/r5UelzC8js/KNwyITsItLS9iSmRL2Au0DkPhBvz9h9M4fpmLcqn
dwSc8YbsmE06m2jFiVSHu72Ko8XY5xQKT1xZhWgsdUvL/uA07EHh4TRHmDDJiVBs9JnxThP8etmBWPYMA4KWtxZjR
11CrQAB+7xLi2CVU5x8bY9CjuS96NveVXYqicPiojr45dAlfHkiUXQY1gkBLPUK8/rhsiLWijZ8GgyN0Nd7uyQ1Fm
NTVgAHNym+XXiiQVijw1ClGdAnS4a72epx0Kz3Qcw+iFYeu2vCX/sZalcYu4frMNjtmfX4E2YU813NdMBTq40SVHP
xt7UnZZZAEZpvAZ9EWT0tLhEajqXa7FUfN0JdLx/whpkrfC/TQINRLg83nrCiyC0xJtKF7sa5mm8DMjcX4aKw7dNr
q7/ta3JdQ01eyi/DsV8cguDJlRTEUaimn0IKZnx9GCdc0cklrz1lRXSxwhtWf1Q0dxGtbM2VaCz+91h76KN3eNR0v
73fHa7tL0HLJPNqFadGtLwH//MMWYa30cNCdA5cXoMMH+fjgQPWfboX0hBdT000otnaeTcMH2+NLL6EY3KdQ5S899f
QyXMotkl0GSLDtqxuh2eOR5V/05ymYXmLSmCK80MaF9QPXD54Na6HHwiT92PMdm2LAq2oKjT3ri9hUfEPZWl+5sq0
fXJQW4PUKH7sGV7+ts2HhEx3lvup6q9/bWwPSJ8ENK26ayS3F67BRqYfWBRGznAWouKyHbjq3nbZjeq/ouIc8MHLp
qx90biqFfkAv9glws2GXG8RQ79Atysf1C5XnzQgj8aX0x3hxpGL0AR5PtMNDZgCBPLQa31GHXxcolK7JLUdF2ATyz
+ihSc4tll+L02ClcR2peMV7fFC07DJJoxTEzgjwliGpf/Z9LEXNwYmb5Mf4lB83YfsGGbx9wRyvfyf+/lh21IMBDg

7s6GJBVVDrmmbEBMJT+a6tiHDyWXCINS883Y966k1j6aF/ZpTglDgrXMX/dKeQW8+hIV2UXAiu0WTC1h6HSfoKXtx
Zj8velQ4pajQZdg3TLlKGeGrj pga5B0ngay982tcC0hbtL8N6dbgAAP3cN0jXV4p1fzdh/yYptF6yIbF4+hIT0iL+
yS7gpP59KweZTybLLcGoMhRr8dDIZP57kL5Ar23rehsQcgWlVDB0l5Qsk5tzYxIO//FSM2ZEmhDf5409w5Xh3rD5l
wdgvi/DXSBP6hZffnxAbNh7RuewSbtb8H04hn8tgVEsj0FerSrnFFox4axdScrkctiu40zgV7+Y8K7uMagmdEXfrP
mAo1J0pkS3x97u6yC7DKbFTqMaiTwcYC0Q02CXUr0/3X8SxS9myy3BKDIUq/Ho+A6sP8qhlcg5CZ8RLKTx6uT7ZBf
DymhM8jWcVGAoVFFtSmlvmBDioRs4iNuxuHG0XU09iknKx7JcLsstw0gyFCt7bFofz6QWyyyACUNYljJBdhmq9szU
0lZJ51sRmRSuEZ0Ui493n5ddBpEDu4SGVWsx4RWuZ1Y0Q+F3NrvAS99Fw8qz5pCTYJfQ0HbHpmHdsSuyy3AaDIXf
rT6YiGieI4GcSBY7hEbZ2obTy0FJswAwFAAAhWYr3tkaJ7sMIgehM2J0KruExpKeb8Y723i+dYChAABYtucC0vJ4T
AI5j7iwu3Ekh11CY/r8t0QK53DBPJcPhcwCM3cuk1NhlyCH2WrHBzs4YuDyofD+9jjkCR0UciLsEuT5+uBLXML27f
0muHqoXMosx0e/8shlch7sEuQy2+z4YLtrdwsuHQrvbI2DmYe5kx0JD7uLXYJk3xy6jMQM1z2gzWVD4WJ6AdZybjI
5EaE14KXUkblLcHLWu8B7LtwtuGwovL89HjYeqEZ0JD6c+xKcxfDhr+CCiy5345KhWc6BnA27B0diswu8u9U1jltw
yVBgl0D0hl2C8/nh+FXEp+bJLqPRuVwosEsgZ1PaJXDgkb0xC+BtF1zpw0VCYdkvF9glkFM5F34XjuR4yy6DqrDpR
BL0J0fKLqNRuVQoFJRY8f1RdgnkPITWgBe5L8FpCQF8tP0c7DIALuUfwrpjV5HPo5fJibBLcH6bTiQjPd91lkZzqV
D47NcE2SUQ0bBLUAazzY6vDl6SXUajcZlQ0JKYhdNjrjU2SM6NXYJyfp5rgsvsi3SZUGCXQM5EaA2Ywy5Bma7mFGN
rTirsMhqfS4RCdqEZG60TzJdB5HAu/C4cYpegKkv2u8YHS5cIhW8PX0aJlQvfkXNgL6BMe8+lu8TSF6oPBSEEvviN
y20T8zjPLkGRhAC+PqT+Hc6qD4V95zJw3gXSnZRBaA140Y1HLyvVmi0XVb/DWfWhwB3M5Ez0h43DgemwssugG5SSW
4LdsWmyy2hQqG6FLNxiBdntGjMGyPKjrQEvP3NfgtKpfQhJ1aHw7eHLSkQ81SPLYJegDttiUpFZYJZdRoNRdSj8fC
pZdgLEAACh1bNLUAmzzY51Kl5pWbWhkXjTjBNXcmSXQQQAuMAuQVU2n1LvsLRqQ2FrTAoER47ICQitHnPSR8kug+r
RwYuZyC22yC6jQag2FLiDmZwFuwT1sdoFdp1V5ywkVYZCYkV+89nyC6DiF2Cim0/kyq7hAahlyDYFZsGM5e1ICfA
LkG9dp5NVeWbBkoMha0c0iInUDrjiF2CwmUVWnAkMuT2Gfv0daFgswtsP6v0to6U5WLYWPzGLkHvtsWo771GdaFw8
GImsgvV0SuAlKN0X8KdssugBrb9jPpGJVQXCpx1RM6AXYJriE3Jx6XMQtlllCvVhYKrnB2JnBe7BNeitllIqqgF2J
Q8JGSoK7VJes6Gs0twJwr7IKqqUFDrwSSkHEKrx1z00HIpV13IREGJVXYZ9UZVoXDsUrbsEsjFXQwbi/1ZPrLLoEZ
kttqx75x6DpZlKBDVE6HVVY24GuwRXdFx7z2qCYX0/BjcyS6SXQa5MHYJritaRSyqyYU1JTUpDzsElzbSYaC8zL+
WT0/FFKehLAodgkuLLPAjMtZ6pj5qJ5QYKdAkgiNDnMzeFyCq1NLt6CaUIi+nC27BHJRCEfjsY9dgsuLVslohSpCI
SGjAflc74gkYJdAZDRy+19VhAL3J5As7BKOdiEPnAj3J5AMQqPDK+wS6HdZhrZVLI7HUCC6QQnhUdjLLoGuoYZUqf
GhYXZcepqruiyMWUdgmjZZdBTKYNB7EpPhT0pRWgyGKTXQa5GHYJVBV2Ck7gYkaB7BLIxbBL0owFJyAGnbskLI
kskugamQVWpCv8GW0GQpEdSA00rySyS6Bqpeco+yFORufCokMBWpEieFR+CWTXQJVLymnWHYJN4WhQFRL7BKOnpIZ
CvIIIXA5S9mtGikHuwSqDYaCRBkFZPrY7bLLIBcgNDRMy+TRy3R9ybkMBWmUnsikHJfCx2B3pq/sMkgBLP6+p0hQS
M1T9otPyiA00vyN+xKolrijWaKU3BLZJZALYJdAdZHC4SN5UhhK1MDYJVBdZRaauWJV7tI7ig6FFA4FUQ07FD6aXQ
LVirDK/sCq6FBQ8gtPzk9odJiXxS6B6k7J+xUUHQr5JTWfJzWcS+GjsSvDT3YZpEBJCL7qQtGhYLEJ2SWQsRfLoJu
Ru6T2C6wKdWUeUeYNU4zK7BL0JdRblvjcp0hTMPJjGGoDQaPe3dgl0E4ovf0IvZYcC0wVqA0wS6GyepfkdRyCkH4+o
vpV2CWNkl0EKx+MUJ0HwEDU3JdglUH9gpSMLZr1SfhEaLZnsEujmCuezJBYFpzE5nyvho7Ezk10C3TybU04HVKWHQ
gn3KVA9sdm1+Bu7BCL0eRdwM6wMBAonP6b7wyYU/RmJqF4o9q/AarPDrtw0jZwMA4GoLGL/EniMAhE5KwXvU1BuKG
igkV0CEZHqKDYU3I06GHQMBiJyPloFvzUpNhQAwmfDILsEIqJKlPzep0hQaKLGf56I1MvP0yi7hBum6FBQchoTkXr
5eij3vYmhQERUz/w82ClIwVagImfETkESHgIROSN/7l0Qg6FARM6Iw0eSNHFjKBCR8+HwkSTsFiJ12XgYdTDpdbLL
uGGKdGUp0BEzkbJQ0eAwk0BnQIR0RslDx0BCg8FP09lv/hEpD7sFCRq4e8BjYIXniIi9WgnIJGHUY/QJm6yyyAic
mju7yG7hJui6FAAgDZBXRJLICJyaB+s7Pck5YdCoLJ/AESkLu2CvGWXcFMUhwpt2SkQkZPQapT/nqT4UGCnQET0or
m/B9wMyj1wDVBKCG9LYLIPZQ+dASoIBQCvU08iI2InILSdzIDKggFAGgT6Cm7BCIitA9mp+AU0IRERM5ADE9Fggg
F7mwmItNUPMIUEkoqOEHQUTK1kIFM48AhgIRUb1op4L9CYBKqQGfvdnIBGRV01U8uFUFaGg0WjQN8JPdhLE5MK6
N/ORXUK9UEUoAMATrfx1l0BELkqrA0a0biq7jHqhnlBoyU6Bi0ToEuYDH4WfR6GMakKhW7gvThrVPB0iUpDItgGyS
6g3qnkXNeq16NncV3YZR0SCBrZRx9ARoKJQAID+3K9ARI3MqNPilpbqee9RVSGMbKuetCYiZeJvwhfuRuUftfZGVa
HQ08IPhIR64RCR81Pbh1FVhYJBp+UQEhE1qoEq2skMqCwUAGBQu0DZJRcRi/Ay6dGjma/sMuqV6kLhtnbqauWiyHn
1a+UPvU5db6PqejYoPclFcBOT7DKIyAVetLHX0BGGwLAAG0GdgmWXQEQuQG07mQGVhsL4XuGySyAilQvzcUPHEHUs
l30tVYZC3wg/hPu6yy6DiFRsbI8waDQa2WXU01WGGkajwbgeYbLLICIVu0ul7zGqDAUAGN9LnT8wIpKvdVNPdA1Xx
/kTKLJtKHQMaYIOkjk9HhE5l7HdQ2WX0GBUGwoAcFdPdgTEVP/U/N6i6lC4u2cYVLgfiIgk6hTaBG2D1DsKoepQa0
bngT4teEY2Iqo/E/o0k1lCglJlKACl3QIRUX0w6DQYr/L3FNWHLt3M0i1HEMiopt3R8cgBHipekdlYeCv6eRi+Q
Rub24v09z2SU00NWHASBL4j05jXlMmFIB/UVze8QoTcmWyhCmrjJL0I0F0ze3uGqWya7Kup/hig9I9u0XY0S1l10FE
CqXXajAlsqSuhqF54QCAEz5lwLeJr3sMohIge7QeEYy2y6TCh4uxkwX8L2WUQKcJoNMCIW1kl9FoXCYUAGDao
FYwusCYIBHVnzS6BK9G62j5lLvKMFN3FS9ZgkR1b+nhrp0lwC4WCgAwJ9ub831kIioVm5p6Yc+Ef6yy2hULhck7Y
09MbRDk0wyiEgBZrrQvoQyLhckQGM3QERUK44h3rijY7DsMhqds4bCra0D0K05r+wyiMiJzRjsel0C4KKhAABPsIs
gomo093d32f08u2wo3NklBC0DPGSXQUR06InbWkPnoqsru2woaLUavDCyg+wyiMjJNPuY4oG+6l8NtTouGwoAMK5H
GG5pyT0zEdEfnnhWDM4GnewpHHpUACA/xvbhcctEBGA0hlHD/ePkF2GVC4fCt2a+eC+3uo+5yoR1c78cV1cdl9CG
ZcPBQB4cVQHeBpdt10kIiCqWygGtAmQXYZ0DAUAUQ3c8NTQtrLLICJJ3AxazI3qJLsMp8BQ+N3021qhub9rrJd0R0
XNGNzGZc6Xcd0Mhd+Z9DRMHc1PCkSuppmfu8sevVwVhsI1RncLrf9WrrUiIpGre2VMJ5eegloRQ6GC/xvXGS4++YD
IZUS2CcDobqGyy3AQDIUKuoT5uPTRjESuQq/VYP64LrLLcDoMhSrMhtUBPu4G2WUQUQN65NYIdAhxndNs1hZDoQpN
vUx49S5+giBSq6ZeJjw3or3sMpySXnYBzmp8r3D8fCoZP55MLl2KKthLCpG95zMUxu2HvTAHxqDW8Bv+J5hC20PYr
MjeswpF5w7BmpMMrckTbhE94Dt4KvTeNR9MZC/OR9buVSik3Qdbct70PsHwv+NxuLe5BQCQf2oHsnd9AmEphlf3kf
Ab0s1xw2t0ClK+mofQKe9Aa+KKua5CowH+fx93jgZug6FQg4Xju+LAhUxkFJhll6J4GT+9D0taApq0fQE6L38UnNq
BLNV/Q9j0JdAa3WF0PgefYIdgDGoFe3E+Mrf9F2lrXkPolHequU9hsyDlq3nQefig6fiXofduCmteGrTG0vnmtsIc
ZP70PgLGPAu9bwhSv30Vphbd4PF7YGT8vAR+g6cyEFzMLAeteUreGnD4qAYBXib8455usstQLuLBIVn98J36GNwa
94VBr8w+A56GHRfY0Qd/RfakyeCh1oIz063wRDQDKbwjvAf8STMyfGw5qZwe7/50VtgL85D4L1/g1uzztD7BMgtWR
cYg0pPoGTNTobG5AHPTrfDFNoebi26w5KeCAa0L0LTGp0eHh0iG+U1I0fQMqQbL4/pKLsMp8ZQuI47u4ZgF/XPAN
TvbHbAGGHRLe+XdfQjS15fKrqm5QUATBAa/Kq9m4L43+DKawjMr8diEvvp4Kry55Cz6vImP2AIDEpXzCUGJzyjnY
ivJgToqFMbAlbEV5yN7z0fxHzKi3p0j0z6TX4r2JvWDS85iEmnD4qBZevbsrDl7MwpXsItmLKJLW5AFTWEfk7FSnQ
0Bz6Dx9URCzG+arsd7Vw5cYTUje9dKeHYeX0PQjjU7BcU50fDsPARB9/8d1swryNzyEYtDbt+BE6Fz80LTq0eQvu
EtCKsZnl3vgHvrPkj9A68+4yFNsCFqd+9Btit8Bk4CZ4dBzXky0CSzR3TCe2D0dvoehgKteDjbsC7D/XEgX//Cpt
dyC5HkQLGvoCMH9/FLSVTAI0WxpA280w8G0aUc+W2EzYr0n74FyAE/Ec+Vf0dCjt0Hr4IuPNpaLQ6mELawpafidwD

a+A7cCIAwKN9JDza/zFEVJwYDUtaAvxHzMDVj/+EpuP+CP2nH5I+FR5uzbtC5+lb30+dnMADHYMwJbKl7DIUgaFQs31b+uOZ09rh7a2xsktRJINfKEIm/RN2czHs5kLovfyRtu4N6H2CHdsImxVp6/4Ja3Yygie+ft0dwDovf2i00mi0fwWHGAKaw1aQBWGzVBquELYLMjd/iICxL8CalQRht8GtRek+I4N/OEqSzsKjb96fNbkdJp6mfCvCd1l16EY3KdQB0/f0Rb9uDbsTDea3aD38oet0B9FF47Avd2tAK4JhKyrCH7oH9C5N7nufZnC08GSLQqH7I7rLFLXSSNCV3m6Yfa+1XBr3QemkLaAsJfu6/idsFsBu73SbUjZyqafNvUyyS5FMRgKdaDTavD0gz05v/kGFJ0/jKLzh2HJTKbRhaNI+fJlGPzD4dVt0ITdhrS1i2B0jkfTcbMBux22/CzY8ks/8ZdJ3/AmsnatdHzt3Wsm7MV5yNr6MSyZV1B47iBy9n8D715RlR7fnJaAwj074TvoEQCA3r8Z0NEi7/hmFJ47CEvGZRhd2zX460CNI9NP604jh0AgeR39fCoZMz47DL5ytVcQswfZuz+BNS8d0jdveHSIH0/tk6E1ecKak4IrHz1e5e2CJ740txalrX/yF30g9wLg06jnhN8vuRKDzG3/gzn1PPTeAfDqPhJN+t9XbkhJCIGUz19Ek1vvh0fbfo7rC+MPIHPLhxA2C3xvexTePUY10LMnGTqGeGPd0wM526i0GAo36IPtcfjPZu5fIHJGHkYd1s4ayNlGN4DDRzfo6Tva4d7e4bLLIKIKNBrg7Qd7MhBuEEPhJvzz3u7o15I7nomcyeyRHTCqS4jsMhSLoXATjH0tlj7aBxEBXDuHyBnc2yscs4a2lV2GojEUbpKfpxHLptyCJm485INIpt4tfLHoPq5VdrMYCvWgbZAXPnykD/Q8jyeRF0G+7vh4cl/ONKoHDIV6MrBtUyy4u6vsMohcj+HAZ9M68cD10oJQ6EeTerfAtMhtZJdBpHLM0m1+N/kvmgbVP1qulQ3DIV6NndMJwzvFH9DYnopmg1wLsP9URfzgCsVvyFeqbVavDexJ7oEnb9tXuI6MbNH9cFd3YNlV2G6jAUGoCHUY9Vj/dHp1AGA1FDmDG4DZfCbIAMhQbi72nEl0/0Z8dAVM9mDmmD0aN5Ss2GwrWPGlh0oQWPLv8N0ZdzJdCpHjPDM+HZ4e3l12GqjEUGkFusQWTLx3AsUvZskshUqyX7uyImUPayC5D9RgKjSSv2IKpKw7icEKW7FKIF0f/xnbGNE73bhQMhUZUUGLFFYs04sDFTNmLECMCRgMsHN8VD/ePkF2Ky2AoNLJCsxXTVh7Er+cZDEQ10WqAN+7rjvv7NpddikthKEhQZLZh+qcHsTc+Q3YpRE5Jr9XgrQd74q4eYbJLcTkMBUMKLTy88ekh7I1LL10KkVMx6rR4b2Iv3NmV50S0gaEgUYnVhR9+E40fj1+VXQqRUyDqtFjokd64oy0XipGFoeAEFu+Ix5ubz8L0nwS5EBvEz58uDFXMPKMoeAksWk4C+rjyG/xCq7FKJG1605L5Y+0gchPm6yS3F5DAUnEpeSh+mfHkJCRqHsUogazYQ+zfCPe7ryBDl0ggHgZLILzZj1xRH0TCLV02s1+FtUJ0wdyIPSnAlDwQLZbXys3BiDlfsuyi6FqEEeBqx+0HeuLVlG0xSqAKGghNbfSAR/7fuFMw2u+xsIoPn1/AmWPpoX4T7ussuhARAUHByBy9mYuZnh5Geb5ZdCtFnu7tnGN64rzvcDNx/4KwYCGpwJbsIT646hJNXcmWXQnRDdFoNXrqzA/5001c5dXYMBYUwW+14a0ssPt59jsczkkIENzHhP/f3wG3tAmWXQRXAUFcy385n4Pmvj+nKdpHsUoiu677ezfB/4zrDx90guxSqJYACauUVWzD/h1NYC+SK7FKIqhtCxiRF93bjchUKxFBQsE0nkvC3tSerWcCd00Q82B0oG0NB4TLySzD/h1PYEJ0kuxRycSFN3LDo3m4Y2jFidil0ExgKKvHzqWT8be1Jp0WVyC6FXNCEPs0wbyy7AzVgKKHITqEFCzacxndHLssuhVxESBM3LLqVg4Z2YHegFgwFFdoTL4aFG2JwNiVPdimkYvf3aYZ54zqjiRu7AzVhKKiUzS7w7eFLeGtLLFJy0aRE9adnc1/MG9sJfSJ43gM1YiioXJHZhv/u0Y+lu86hwGyTXQ4pWLiv0168swPu6hEGjUYjuxxqIAwFF5GWV4K3t8biq40XYOMh0VQH3iY9Zg5tg2kDW3HNIhfAUHAx8a15+0ePZ7A1JlV2KeTkjHotHu7fAR0GtKvTL5PscqiRMBrc1P5zGXh9Uwx0XMmRXQo5Gb1Wg/t6N8NfhRDGJ3djkMBRcmhMAPx6/izc2xSMzkUBdnUYDj00ehudHtEerpp6yyFJGAoEm1lgy+lklP/lIg5czJRdDjUyo06Lsd1D8cTtrdEptInsckgyhgKVC+JyDpbvvYAN0VdhsfFXQ82Cm5jwcP8IT0rfgvsMyIGHQFVKzS3Gp/sT8MWBRc64pzK9W/hisMRLj0kWC0N0K7sccjIMBapRscWgtUevYPneC4hNyZddDt2gsiGiqQNbonszX9n1kBNjKfCt7YlLw/JfLmBnbBr4W6MMQd4mPHJrBCb2a4FABw4R0fUxFKj0LqQX4IdjV7HPRBLXV3JC0q0G/Vr646F+zTLERHXGUKCbEp+ah43RyQwIyQw6DSLbNMXoriEY2SUE/p5G2SWRQjEUqn7Ep+ZhQ3QSNp1I4v6HRmDSa3F7+0CM7hqCYZ2CeS4DqhcMBWoQcSl52HgiCRujkxCXyoCoLx5GHYZ2CMKdXUNwR8cgeJr0sksilWEoUI0LS8nDz6eSse9cBo4kZqHYypddkqI09TJhUNsAj04WisHtA7koHTUohgI1qhKrDccSs/Hr+UzsP5+0o4nZKLEyJmponUD7YG/0ifBzXCICu0QENR6GAklVYrXh5JUcHenIxtFLWTiSkI3k3GLZZTUab5MePvV40gKgZ3NfePNMZiQRQ4GcTLJ0EY4mZuP4pWycTy9AQkYBEjIKFd9RmPratAzwRJewJu9ewh0CPaGVssTlpDzYCiQIgghkJRTjIu/B8TFjAikpJf+m5hZiEIn0aucu0GHMF83NPPzQKumnmgd6IlWTUsv4b7uPGMZ0T2GAqlCSm4xLqYXICGzENmFZuSX2FBQYi29mEv/n1/29TXXVQwTrab0jd3dqIe7UQsPgX5uRh08DDq4G0svZf/3M0oR0sSEMF93hPm6I9zXHX48PoAUjqFALS1uFygwW2G1CbgbDZzZQy6PoUBERA5cFIWtiBwYCKRE5MBQICiIb4YCNyjdud3dj3LhxCAsLg0ajwdq1a2WXRES1wFCgBlFQUIAePXrggw8+kF0KEDUBLikBjF69GiMHjladhlEVEfsFiIyIGhQEREDgwFiIjYyCgQEZEQ4GIiBw4+4gaRH5+PuLj4x1fX7hwAceOHY0/vz9atGghsTIiqgkXxKMGsXPnTgwd0rTS9V0mTMHKLsSbvyAiqhWGAHER0XCfAHER0TAUiIjIgaFAREQ0DAUiInJgKBARKQNDgYiIHBgKRETKwFagIiIHhgIRETKwFiIyIGhQEREDgwFiIjYyCgQEZEQ4GIiBwYCKRE5MBQICiIb4YCERE5MBSiMiBoUBERA4MBSiicAoEBGRA00BiIgcGAper0TAUCAiIgeGAHER0TAUiIjIgaFAREQ0DAUiInJgKBARKQNDgYiIHBgKRETK8P8eySc7N2oYJQAAAABJRu5ErkJggg==",

"text/plain": [

"<Figure size 640x480 with 1 Axes>"

]

},

"metadata": {},

"output_type": "display_data"

}

],

"source": [

"labels = df3['Type'].value_counts().index\n",

"sizes = df3['Type'].value_counts().values\n",

"plt.pie(sizes, labels=labels, autopct='%1.1f%%', startangle=90)\n",

"plt.title('Free vs Paid Apps Distribution')\n",

"plt.show()"

]

},

{

"cell_type": "code",

"execution_count": 90,

"id": "862c657f-c1c1-461d-9a7a-8ce36a9d4fb7",

"metadata": {},

"outputs": [

{

CADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAA
AAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0A
AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDAD
QAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgM
ANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANi
AwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA
2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAA
ADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAA
AAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AA
AAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj c
AAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANC
NwAAAAAANiAwA0AAAAAgA0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANCNwAAAAAANiAwA0AAAAAgA
0I3AAAAAA2IDADQAAAAACADQj cAAAAAADYgMANAAAAIANPB64x48frxw5csj f31/PPfecfv75Z08fEgAAAAAAD82
jgXvWrFnq3Lmz+vbtqylbtujll19W1apVdfjwYU8eFgAAAAAAD83Hk8XHjBmj1q1bq02bNpKkjz/+wEuWLNHnn3+u
4c0Hx3l8dHS0oq0jndsXL16UJF26dEmSdDP6qm3HGLvjTsm9np01qeeemsm9np01k3u9hGom93p21qSee2om93p21
kzu9RKqmdzr2VmTeu6pmdzr2VnTU/Vi/2uM+c+fcZjEPMoG169fV0BAG0bMmaNatWo5b3/nnXe0detWrVmzJs7PDB
w4UIMGDxLnYQIAAAAAEMER10eU0XPmez7GYy3cZ86c0c2bN/XUU0+53P7UU0/pxIkT8f5M79691bVrV+f2rVu3d07
c0T3xxBNy0ByJrn3p0iVlyZJFR44cUUhIyIM9gfv7nqeqEm9pF3PEzWpR71HvSb1knY9T9SkHvUe9ZrUS9r1PFGT
evEzxygyMLIZM2b8z8d6tEu5pDhB2RiTYHj28/0Tn5+fy22pUqV64NohISFue3N4op4naIvadfzRE3qUe9Rr0m9p
F3PEzWpR71HvSb1knY9T9SkXlyhoaGJepzHJk1LmzatvL2947Rmnp1Kk6rNwAAAAAASY3HANEKFCn03HPPadmyZS
63L1u2TC+++KKHjgoAAAAAGt4tEt5165d1bRpUz3//PMqVaqUJk6cqM0HD6tdu3a21vXz890AAQPidE9PLvU8UZN
6SbueJ2pSj3qPek3qJe16nqhJPeo96jWp17TreaIm9R6ex2YpjzV+/HiNHDLSx48fV6FChfTRRx+pTJkynjwAAAA
AAAmescDNwAAAAAAYZHHxnADAAAAAJCcEbgBAAAAALABgRsAAAAABsQuAEAAAAPiomJ0eHDhz19GABsQOAGAAAAAP
Gjnzp3KkSOH7XVYmJ0+fJl2+sA+D8E7mTglq1bnj6Ex8KaNWu0aNEint9/3t0Hgv8wdepURUDHe/owHjuXLl3y9C
EgiTDG6NSpU54+jGT5MmTGjx4sKcPI0m7du2apkyZovHjx2vv3r2ePpyHsmjRIk2bNs3ltvfff19BQUFKLSqVXn3
1Vc5nkrq//vhDNWrU8PRHIBGS9bJgif3i6d+/v2U1z507pytXrihz5sz023bu3KnRo0crKipKNWwVWKNgJSyrJ0kl
SpTQtGnTlCdPHkv3m5CNGzfqueeek7e3t6TbJ040h8N5f3R0t0bPn6/69evbdgzXrl3TrFmzFBUVpUqVKil37tyW7
XvUqFG6fPmyBg0aJ0n286tataqWLl0qSUqXLp1WrFihggULWLlVr44cLr+/+DgcDu3bt8+Seo8Db29vHT9+X0nSpf
P0oSQbo0ePVvf3R08/9KLS3r11Ve1YcMGs+rdunVLt27dtko+Pj/02kydP6osvvlBUVJRef/11vfTSS5bU8qSjR4/
qu+++099//y2Hw6E8efKodu3aypQpk6cP7aEEBAT0KFDDevLJJyVJVapUUUREhDJkyCDp9t8yY8aMunnzpmU1//jj
Dz377L0W7e9hnt9/XgswLFCz53cUm/btm169tlnLlud7tu3T++//74MTZokScqaNatLy6i3t7fWrvunVhZWLJPk
urUqa0JYefqiSeesGyFCXn3Xd1/fp1jR07VpJ0/fp1lShRQjt37LRAQIBiYmK0bNkylSpVvyZjkaz/+73yyiuqU6
e00nToIElav369Xn75f0X0ePFj58+dX3759VbVqVY0ZM8aSep7izteMJyxbtkxLly6Vr6+v2rRpo6efflp//fWXevX
qpQULFqhSpUpavHixJbU8kWEsmbNGkVFRaUqVJKnTq1W2rakVKH7mLFiiV4n8Ph0J49e3Tt2jVLv/DDwsKUIUMG
5wfYqV0nLC9fPmXmFE5c+bUTz/9pPDwcDVt2tSymvXr19fChQv1wQcfqF0nTpbtNyF3h5mQkBBT3bpVTz/9tCTrT
6Tc/aX47LPPqmfPnmrQoIEKac6c0WrevLmWLvum/Pnzq1mzZgoICNDs2bMtqRf7v0Jz80BBTZgwQdHR0Za+Tm/duq
Wd03fqmWeekSR98cUXun79uvN+b29vtW/fXl5e1nScmTplaQIEZ9WJqZeXl06c00G2wP3bb7/p3LlZqlq1qv02qV0
nasCAAc4vqU8//VR+fn6W1axWrZpmzJih0NBQSBdbLjp06KBuqVJJks6ePauXX35Zu3btsqReypQpNX78eLVs2TL0
fZcvX1alSpV08eJfy+q1bNLSvr6+mjhxoipQmJJSBQsW1LVR15QhQwb2rVL8+fPV7Vq1Syp99Zbb2nkyJEKCGqSJ
E2bNk21atVybl+4cEGNGjXSokWLLKknSePHj1fXrl11/fp1hYaGyhijS5cuKUWKfBozZozeeusty2pJ7n3N3P0eDA
401rZt21y+JzJkyGBpD60UKVLovffeU9++fS377HoYVgcod9f3LmzAgICNGzYME3/4b9+/d3/k1nzZqlrFmz6os
vvrCkniS9+OKL2r9/v7788ku99tprlu03PoUKFdKwYcP0+uuvS5IiIiLURVs3bdmyRVmzZlWrVq106tQpLVy40Nbj
iGX13y9dunRasmSJ8ly4a9eu2rVrlz0cLVq0S0+8846LLfmtWrX6z8c4HA6Fh4dbVt0drxlJunr1qlasW0FsWe7du
7dLjzpvb28NGTJE/v7+D1lrypQatmypdKkSaNz584pbdq0zu+G0nXqqFu3bipUqNBD14nliQzj7kYuTzTGSPLMY2
jLli2mcuXKxtfX17Rt29bSfWfPnt2sWrXKuTlq1CiTm2d0c+PGDed2iRiLLK1pjDFz5swx6dKLMxUrVjRHjhyxfP9
3cjgc5uTjK87toKAgS7/fPuF2iRmNjMPhsKxewYIFzf5Z853bkyZNMqLtpzYHDx40t27dMi1atDDVqlWzrF6qVKmR
rl27nNstWrQwT0zcW7/+uuvJnPMzJbV8/Zs2D10N586djZ+fnylTpoz59ddfLd3/119/bcquKEPdgokMpkzZzbZs
2c32bNnN0FBQear76yrF6qVKkS/Jc6dWqTlUK4+XLZV9h8NhTpo6Zdn+/kuVKLXMBx984Nzevn278fHxMW3atD
EffvihSZ8+vRkwYIClNb28vFzeh8HBwXHeh1b+TufMmWP8/f3N999/73J7ZGSKkVWqlMmTJ485ceKEZfVvY585tlix
Z4tweN26cyZahg7lw4YixpgePXqYcuXKwVbP3b/PH3/80Xh7e5tu3bqZY8e00W8/duyY6dKli/Hx8TELFy60rJ4x
7n20ifmesPL3aywXcxcuNjkZzYvPCC2bNnj6X7fhBbt261/Dm6s17BgXNypUrndt3/w1Xr15tcuXKZV69Y4y5d
euWGTlypEmZmqVp1aqVuXtpkqX7v1NwCLDZu3evc7thw4bmf//7n3N7y5YtJkOGDJbV27Zt2z3/zZ0ly9K/n7+/vz
l06JBzu3jx4mbEiBH07YMHD5qAgADL6hljTM2aNRp899pr5mUKVNa/p5w52vGGG0++OILU6NGDed2UFCQKVGihCl
XrpwpV66cSZ8+vRkzZowlYoUKWKGDx9ujDFm1qxZxuFwmGeffdb8888/luz/bp7IMMWKFTmzZ850bs+ePdukTJnS
rFu3zpw9e9ZUr17d1KtXz7J6RYsWTFBfswLFTFBAGC2f249V4N6/f79p3Lix8fHxMfXr1zd///235TX8/f3NwYMHn
dtVq1Y13bt3d27v2bPHpEmTxvK6xhhz6tQpU69ePZMqVSRtQVMn06VLF5d/VnH3iZS7vxQDAwNdnk/evHnN+PHjnd
uHDh0y/v7+ltW705UrV8zQoUNNaGioKVKki0Un3LEqVqxovnmG+f23X/Dzz//3NIwk5Bjx46Ztm3bGL9fX105cmX
L9utw0Ey1atVMrVq17vnPKunTpzebNm1ybvfp08eULl3auT179myTP39+y+oZ45LA8+WXX5qUKVM6T8IjIyN6dKl
Te7cuV1CoxUCAGLM/v37ndu1atUyHTt2dG7v3LnTPPnkk5bVc/fvs0yZmqZv374J3t+3b1+Xi2JWc0dz9MTr0xhjL
ly4YJo3b24CAwPNJ598Yvn+70dSD9xBQUHmWIEDzu30nTubM2f00LCPhjxo23fh7t27TcmSJU22bNnMhx9+aMa0He
vyzwpqhoaEu54Hzs2c34eHhzu0DBw5Y+vvcDofx8vIyDocjzr/Y2638+z399NNm8eLFXpjbn9UpUqQw69atc97/+++
/m7Rwp01pW717mzZtnChQoYFKLSuUMkFZz2vGGGnefvllM3fuX0f23Z9t06ZNMylVLrSkVLBQKPN780bNm8bHx8es
Xr3akn3HxxMZ5LF05DLG3sZYf4zx+e828KtVzJkzGjRokCZ0nKiXNpJ69evV/HixW2pFRISogsXLihbtmySbo93b
t26tfN+h8Nh22R0adKkUf78+fX9999ry5YtLmMf/2uM8KPMY8tL5o6RDxs2bNB7773n3E6VKpWLE3/kypVLa9eu1d
NPP63Dhw/r77//VtmyZZ33//vvv5aPFbp586a+/PJLDRo0SP7+/vr000/VpEkT2/5uu3fvVoECBRK8v2zZsurTp48
ttaXb3YNHjBihsWPHqmDBglqyZInKly9vaY3g4GCLTJnS0n0m5Pz583rqqaec22vWrFGVKlWc28WLF9eRI0fccix2
at0mjcd606eaNwtq/vz5eu+993TixAmtWbPG0TbXKv7+/rp69apze80GDRo1apTL/Ul5pt0tW7Y4u8vHp2nTpvccb

vKoczgcLp9fd2/bJTQ0VJMnT1aNgjXUsGFD9evXzsnfSKxz587ZfHx26Nq16z3vP336tKX1vLy8d0rUKWXPnL2S9N
FHH7ncf/LkSfn6+lpam1a+fPnUunVrtWvXTh999FGc85m3337bkhoLFixQ165dtXpNth0+fNjle+jQoUMun+sP68C
BA5btKzHq1q2rzp07q0+fPlq0aJHSP0+vkiVL0u/fvHmzpePv4/PLL7+oZ8+e2rJlizzp27KhevXrZNh7XHa8ZSfr7
779d5kzy9/d3GclYwgsV0MfNP6yoqCgFBgZKuv1+9Pf3V5YsWSzZd3w8kWFu3LjHmtzu119/1Tvvv0Pczpgxo86c0
WNpzTsd0HBA7733nmbNmQXatWtr586dls4LFStZB+6oqCiNHj1aY8aMUa5cubRgwQK9+uqrTTZ84YUX9Mknn+jLL7
/U3LlZFRkZqVdeecV5/99//23Lm2Xnzplq2rSpzp8/r6VLL1oeXu62a9cunThxQtLt8RZ//fWX8+TX6jeGu78U27d
vr44d0+rnn3/Whg0bVKpUKZdwunLlynv0D3C/Zs+erX79+unixYvq06eP2rdvrxQpUli2//ic0XPG0TZVkvbv3+9y
EcHX11dRUVGW171+/brGjRunYcOGKW3atIqIiFDdunUtryNjN3zyidvGcD/11FM6c0CAsmTJouvXr+uPP/5wjkeSb
l9gsPrENL4A445A06NHD50/f14VKLRQ9uzZtWbNGLsm+CpSpIimTZum4c0H6+eff9bJkyddPkv37dunjBkzWL7XXW
7dunXP14Svr6/LhUYruPM1Y4xRnjx5nPu/fPmyihUr5jwxtfQ53WnTpk167733LCdPhNxr1s3lxNtKn3zyyT3vP3r
0qKX1tmzZ8p+PKV0mjGX1ChYsqOXLL+uFF16I9/4LS5ZY0n401smTJ9WmTRutW7d04eHhat68ueUlpNvzw4SFhWnh
woXauX0nqlWr5rIs16JFixJ87g8iNsTcy9atWxPluMQYMGAjh07prffflvp06fX90nTXS4+zZgxw7YZrnfu3Klev
Xpp8eLFatasmWb0n0kyEZfV3PWakaSLFy+6fKbcfaHr1q1blobSJUuW00fduHXrllasWKE///zT5TGx8xASLE9kGE
80cknubYyVknngzpkzpyIjI9WpUyeFhYXJ4XBo+/btCR5XuHBhy2o0GTJEFStW1PTp0xUTE6M+ffq4XM2b0X0mywv
JC5OHd9egQYPUqFEjR07VsHBWZbuPz4VKLRw0WgK/dB20BxxZi1/W07+Umzbtq18fHz0448/qkyZMhowYIDL/ce0
HUvUxCCJ1bBhQ6VMmVJhYWE6d0iQevXqFe/jrJxJ9KmnntKePXuUM2d0SXL0JBxr9+7dSp8+vWX1jDGa0nWq+vfv
5iYGA0bNkytW7e00/JkFFXf36KhSpYp69eqLEsNGa68e0QICNDLL7/svH/79u3037VVjDFq0aKF88rwtWvX1K5d0+
fVcKuvQteuXdtl29fXV2nTpo3TajB37LxL6r333nuqVq2aZs+erePHj6tFixYurejff/+9SpcubUmtWP3791dAQIC
k2xeH3n//feeJzpUrVyytVbBgQc2fP19dunSJ9/558+ZZNkLMLHe+ZiIiIizbV2LFxMRoWABGj16tDp06KBhw4ZZ
MnFRQu5u8Y1P1qxZLau3atUqy/avGC1btLTnzp1VpEgRva9e3eW+BQsW6IMPPTDHH39sac2ZM2eqY8e0KlasmLZv3
25ra16d0nW0aNEiLVy4UK+++mqcSWcDagIsn7gwPhcvXtTXx3+tr776Stu2bbNs0rSagIA4y4LdyY7X05EjR9S/f3
9Nnz5dNwRU0Pbt25U/f37L69zJna8ZScqC0bP+/PPPbHsHbN++3dKLC3dfPGjbtq3LtsPhs0w144kM4+5GLk80xkr
JfJby07t4xAbBu7etfKHG0n36tNavX6/06d0rRIkSLvctXLhQBQoUcAmMDytDhgYa0HGiw2ZnLG63KCEGVVdpJwn5
8uVauHCh0qdPr06d0jLPiivP0KBBKlu2rMqVK2dZPXcqV65copYFW7lypWU1W7VqpT179uiXX36Jc58xRqVL1la+f
Pmcy8E8rMKFC2vfvn3q1KmTc+bb+ISEhFhS92zLJ8+fVq1a9fWL7/8oqCgIE2ZMkWLatVy3l+hQgWVLF577//vm
U1W7RokagLC1Yfn/hmJ7eznnS7J82yZcuUPn16latXz+UzfeLEiXrhhRdUtGhRS2oL5n0owXeS0mXKFLVv316jR4/
Wm2++6WwxiYmJ0YQJE/Tuu+9q/PjxatGihSX1JM/8Dd2pc0HCunz5siIiIuI9Kdy9e7eqV6+u/fv3e+Do7Ldjxw6F
h4dbGoLDwsI0a9Ys5cuXT3nz5pXD4dBff/2LPXv2qE6d0pat1hErMDDQbSuuDB48WN27d0/w+8huK1eu1KRJkzR37
lxly5ZnderUUZ06dSWNF/dixyz6AQEBcJgc6tSpk1588cUEH2dVi6x0+zUzYsQIdezY0bJ93ss777yj5cuX6/fff4
9zQe/q1at6/vnnVbFixSQ7JMjdGUaSwSPD9e0PPyp9+vQaMGCAS4PPW2+9pYoVK8a56P+g0qdPH6cxNj5WNsZKYt
weyIYesIzzzyjn3/+2bm0Cx70sWPHNGbMGPXv3z90ALx48aKGd2q7t27W9qN3d327dunZ599Vvny5VP37t2dXT//
+usvjR49Wnv27NHvv/+uXLLyWVLv7otfd7P64teaNwtUunRp27qSJutixYsKCGqKd8xoUFC7QYUMFkL0795d8AMU
XBwsLMHxL59+3T58mW9/fbbiWpBxf9p06aNPv74Y5fhMndy9zJdZ8+e1bRp09S5c2fbaLy6dEkzSsxQeHi4Nm/erM
KFC2vr1q2W1pg5c6Zmzpypv//+w5KU03duhYWFqWHDhpbWkaS9e/faMn4yPncvceo0//77ryZPnqxJkyYpKipK9ev
X1xdfKfT27bdc14V02zbtK3FihWzdGm+xCzH3VDV+PGj fXFF1+4pXendLv7etGiRZUiRQp17NjR5fxp3LhxioMj
0ZYtW5L00eK9HD161JZhZ07iqcbYZB24PcHda+NK7v/S2Lt3r/r3768JEybEG0jbt2+voU0H0tdbfVjnzp3TLStXX
Lro7Ny5U6NHj3aucdyoUSNLakm3T4IvXbqU4IRG7dq1U2hoqEaMGGFZzTud0XNGDofDljErd9q4caNatGihv/76yx
mCjTHKly+fIiIi4lzZfBhr1qxJ100s6qrk7nW/PXHidvPmTefkHndPDnflyhX9888/KLS0C0xHvGD+0eff3Tx4kU
999xzzttWrFihoU0H0t/3dk7s5y4bNmzQjBkznGvh5smTRw0bNnSZ3MhdrGwBTuznvztbm90RuI0xWrp0qcLDwzV/
/nyFhIRYPpmZdPszNTw8XN99952uXbumd999V23atLHsIqmN/PDDD4L6nBUtp07uCVWtWjWtW7d0NWrUUOPGjVWLS
hV5e3vL19fXY4HbnReg70KJ798DBw6offv2WrZsmT0w0Rw0VapUSePHj7fs/Pett97SyJEjnRcRp02bplq1ajm3L1
y4oEaNGmnRokWW1LuXEyd06P3339dXX33LMqHpw5o9e7Zq1qzpbJA4ePCgsmTJ4my4uHLLisaNG6cePXpYus9TjbH
JPnBfunTJGQoXLVqkmJgY533e3t5xxiU9rLv+CEhIdq6davzzXfy5EllzJjR0g84d39pvPnm0qVKpVGjhwZ7/09
e/bUpUuX9Pnnn1tSLywsTBkyZHC0YT516pTy5cunjBkzKmf0nPrpp58UHH6upk2bWlKvUKFC+uKLL/TSSy/Fe//69
ev1v//9Tzt37rSknnT7Q7Nv376aNWuWc8b11KLtQ2HDhho6dKitvRe2bNniPNnPtTu327qz2eles6A6HA5FRUUpJi
bGsvehu9+dkjR58mSNGzd0v/32W5wW9Zs3b6pEiRLq3LmzmjRpYkm9xMxb4HA4FB4ebkm9WrVudQVChQhoyZiik2yc
4BKSW1Msvv+wc7jBkyBDLWg8HDx6cqMf179/fdknQPiitPwL28vJQtWY1atTou+L02ejtZudAePgW0aGm5JfK+e
rKNHj6px48Zq1qyZypcvb9LcFcePH1dERIS2dQtQsLEyNgjVSqVKLPBLY7HD3BCK7W6Bib7PqNXry5Mk4c5jYxcfHR
2+//bbat2/v0opY4H44nvj+jXxu3Dn9888/km5P/pUmTRpL9+/uTHHhwgV16NBBS5cula+vr3r16qWOHTtq4MBCGj
16tAoWLKiuXbsqLCzMknqSZ3KTJyTrSdN+/PFHvffee86ZPRs0a0Ay87LD4dCsWbMsnSX57i8Gd13PiIyM/M/JYaw
aH7t27dp7TsRRv359S1ucN2zY4DKmc0rUuQqTJo22bt0qHx8fjR49Wp999p1lgfvAgQP3n0gmc+bM0njwoCW1pNsF
2KVKLXKep0XPn1/GG03evVuTJ0/WihUrth79etuW0ihWrJjbQvbRo0f13Xff6e+//5bD4VCEPHLUu3Zty7snJbRM3
PHjxzVo0CBNmjRjLSpVsRsmu4WHh6t79+7xnsx7e3urR48eGjdunGWB+15L7928eVPLly9XdHS0ZYF78+bNLle0v/
76a+XJk0dLliYRdHt81aeffmpZ4B44cKAYZsyod0nSJfi57XA4LAvchw8fTtTjRjX0y51mzpypyiIgIjRkzRLWrVLW
rVq1UrVq1JNvjIj7R0dGa03euvvrqK61fv15Vq1bVmDFjFBYwPl69elkeoHLkyKF69erps88+U6VKLWz/XXp5eSVq
fpE7GzIelt3dm40Dg7Vt2zbLWgzvVqFchf8cevTHH39YUuvnn3/WpEmT9PzzzytFvnxq2rSpGjRoYmM+43Pp0qV73
h8ZGwLb7TLz5mjGjBn07/rcuX0rUaNGtq1K4qmlb90kSWPppL13c3em6N0nj9auXavmzZtr8eLF6tKlixYvXqxr16
7pp59+snzCNMLzuWnTpk3xvkaFF/55W+ol68A9ceLE0JMo/PPPP84P7pEjR2rSpEm2fQC4051rAt7N6vEIhw4duue
VxLRp01q65vCJEydcJmhYuXKlatWq5fySfP311zV8+HDL6qVMmVIHDx5M8ET34MGDLq7vPHjwYKVIKUL79u2LM+Zn
80DBevXVzV48GBLx3N6ojVv/Pjx6tq1q65fv67Q0FAZY3TpoIw9++67GjNmjK2zwbj3e87l+5IiJUTxezZs+ee3
Y6LFy+u3bt3W1bv+++/j/f2+fPnq0+fPvLz87P09XLMzBmXYSSrVq1ymRiyXLly6tatm2X1qLSpolWrVun5559Xq1
atVL16ddmTgAEfak8pL2Z5fE02+zYxyZu9SvX1/169fX0aNHNNxyZHxP0kVvmmmmjVrptatW9syTjd16t3PPG2Mhh
KUQZMmVsmQZFL8J3377rf0iqJWtP3fKLi2blq1bp6xZsyptbmzKly+fLXViJfSel2739P000/ddnJs18qVKyc4
5t9qpUqVUqLSpTR27FjNnDlTkyZNUteuXXXrli0tW7ZMWbJksXQccqpUqe75frB6RRnp9gWtsLawZkzR3ny5FG+f
PlkjNH0nTvVoEED1atXTzNmzLC87p1LECbk3LLzltRyd28vd1q4cKEiIiJUsWJFvfxWw8qVK5fy5MLj+WoEntajRw
+NHj1aQUFBevrpp2WM0erVqzV27Fh1797dliGjyTpwb9++/Z4ngFWrVtXo0aMtremptXG//fZby7uyJCQ0NFT79u1
LchZDP//8Y1lrunS7Zf7ChQv0ehs3blTr1q2d9zscDkuXsYLrooSmTZuW4HqmU6d0tfSK5rx58zRhwoR4J9hInz69

Ro4cqXbt2lkau091IuVw0LRnzx5du3bNsgC1c0FCvf322+rcub06devmXN7p+PHjGjVqLn555x1lz55dlapVs6ReL
Heu+/1f635aH26ioqLu2YIRGRlp+VJWd/rll1/Us2dPbdmyRR07dLSvXr0s7YWRJk0aHT9+XFmyZNGtW7e0efNmly
W0rl+/bunJ/qJFi3T8+HFNNjxZ7777rtq2batmzZqpVatWCS7/8jAcDocyZ86sFi1a6LXXNp7BH/ukilTjvXt21d
9+/bVmjVrNHDGQI0aNUpnzpyxvNe0u08Kb9686fz0t/PiTKzYLSXcW8NVVhX5cmTx9mDxY7zjDfeeCP0bX/99Zd6
9+6tBQsWqHHjxs4hH0nVu+++6/auyAEBaWrVqpVztZdW8HB98MEH6tWrlpVqpTocez/xd3LyEm334PLly/XDz/8E
GeN7x9++EETw7bU2LFjLZ9IcNCqQf95wdsq7u7t5U7Hjh1z9sx5+umn5e/vrzZt2nj4qKw1ZcoUffrpp/rkk0/Utm
1b+fr6SpJu3Lihzz//XD179LTBggUtm+PhySRjfn5+Zv/+c7tTZs2mevXrzu39+/fb1KkSGFPtYfDYapVq2Zq1ap
latWqZXx8fMyrr77q3K5WrZrx8vKyv0bJkyct3ee91KtXz9SsWTPB+19//XVTt25dy+rVqFHDtGrVyty8edPMmTPH
pEiRwpw7d855/48//mjy5ctnWb2VK1cab29v061bN3PixAnn7Sd0nDBdu3Y13t7eZsWKfZbVS5EihTly5EiC9x85c
sT4+fLZVu9etmzZYipXrmx8fX1N27ZtLdtvmTJLTN++fR08v2/fvqZMmTKW1bt165aZPHmyyZo1q8mYMa0ZMGgCiY
mJsWz/d3P3e9AYY4oUKWI+///zzB0//7LPPTJEiRSyv++eff5oaNWoYHx8f06pVq3u+dh9GWFiyqVGjhj18+LD58MM
PTVBQKLl8+bLz/m+//dYULlZyLtrGGLNmzRrTokULExwcbF588UVz5coVS/d//Phx88EHH5h8+fKZp556ynTr1s3s
2rXL0hp3S5UqlUmdOnWC/4KDgy3/fjLGMktXr5pp06aZ8uXLM5QpU5oGDRqYa9euWV7H3a5evWqmT5/ufF61a9c2c
+f0Nb6+vmbnzp221o6MjDQTJ040JUuWNA6Hw5QrV85MnDjRnDp1ypZ6R48eNW3atDG+vr6mRo0aZseOHbbUuVtQUJ
DZt2+fLfv28vJy++d2QmJiYsz3339vXnvTNU8fykN55plnThh4eIL3f/XVV6ZQoUKW1vTE92985s2bZwoUKGBSpUp
lhg8fbsk+HQ6Hadu2renSpYvp0qWLSZEihWnVqpVzu23btpZ+Znt5ebl8hgQFBbnkKDs4HA4zdepUM3/+fDN//nwT
EBBgJk6c6NyeMmWKpc+xePHiZsyYMQne/+GHH5rixYtbVi9Wsp40LWPGjJo6daoqVqwY7/1Lly5V8+bHdfz4cctqe
mKdU3dPGLFLyxaVKLVKNWRUUII8ePZytP3/99ZdGjhyphQsXav369Xr22Wctqbd161ZvRfHrkZGRiomJUz8+fVyuqj
dt2LSBgYH64osvLKknSRMmTNA777yJgzduKCQkRA6HQxcvXpSvr68++ugjtw/f3rJamTJl0qxZsxKcp03nn39Ww4Y
NdfToUctq3u3AgQN67733NGvWLNWuXVtDhw61tMtnSEiINm3aLGBL4Z49e/T8889bNqbM3et+e2KW1JEjR2rkyJFa
uXJlnPUit23bpgoVKqhHjx6Wzex55MgR9e/fX90nT1eNGjU0bNgw5c+f35J9x+fAgQ0qVKmSDhw4IC8vL33yyScu7
7uaNWsqR44cti2ddfXqVc2ZM0efffaZduzYoRMnTljac+d069atU0REh0bMmaMCBQqodevWat26teVjdCdPnpyoIt
D/6q2RWL/99pvCw8M1a9Ys5cyZU6latVLjxoltm4/Ck/bt26eIiAhNmTJFR48eVhYmFq0aKFXnnF9tbv3bt3Kzw
8XN0mTd05c+d048YNY/Z98eJFDRs2TJ9++qmKFi2qESNG60WXX7Zs//8LJCRE27Zts3zdXylx506bNm1S8eLFLa13
r5Ulr169qr1796pgwYKwv17cNXeKdHtI3p49exIcknfo0CHly5fP0lmuPfH9eyc7e3uVK1cuUZ/ZVvVm8PLyUtWqV
eXn5ydJWrbgV555RUFbGa6PG7u3LmW1Iut+V+s7CEYGBioHTt2JDgvxP79+/XMM8+4zPlLhWQduBs2bKgrV64k2D
2nRo0aCgwM1KxZs9x8ZNBKkS0HNM/ebPsyUnf68ccf1apVK509e9b19ieeeeEJfffWVpWNVJen06dNav3690qdPH2e
5qoULF6pAgQKWfyEPXpUs2fP1j///CNjjPLkya06deu6jCu1QuvWrfXPP/9o2bJlCdZpjo60VuXKLZUzZ05buiEd
OXNGgwYN0sSJE/XSSy/pgw8+s0zk4k5BQUHavn37PT/gChcurMuXL1tSz93rfntiltQbN27o1Vdf1bp161SxYkXly
5dPDodDu3fv1vLly1W6dGktW7bM2V3qYQUEBMjhckhTp0568cUXE3ycle/9GzduaNeuXXryySeVMWNGl/u2bdumzJ
kzW/659+uvv2rSpEmaPXu28uTJo5YtW6pRo0a2rhQ06+TJkwoLC90aNLwt0+vRpy4cJXb582J3jcuRSjWLKhTp06pUaN
Gat26dZyLQnb4rHcswayxmfw7duacmSJQoPD9eCBQsUFBQ53vSLjdu3NCCBQtUu3ZTs/Y3cQjRjRgXqUtpKp9ew
YcPi7WJutbv/hhcuXFBTSEick3Ir/oaHDH1S1qxZFRUVJW9vb5cQvHXrVr333ntatGiRZd8T7L5ZQkp47pQUKPLVYM
ndKmJrptHr16gTf7zt27FDZsmUtF096apbynTt3qlvXlq8eLGAwumQYMGWX5+6G6eaDR0t5CQEG3cuDHB0TD27N
mj4sWL/+ekg/crWQfu2JbY1157TT169HB0LLZnx6NGDHC8pbYxLBynVNPu3r1qhYvXuwSSF999dUEWxMRv3//Vf
PP/+8/Pz81KFDB+eHwK5duszR+/HhFR0dr8+bNypIli2U1o6KiNHR0aI0ZM0a5cuXS80HD9eqrr1q2/7uVKFFCDrs2
dBmDe6cxY8Zo1qxZ+u233yyp5+51v1u2bKlPPvnE0glvEuPgJrv66K0P9M0332jv3r3092GjRo3UuXPn0BdwHoa7r
0K728iRiXUREaGzZ8+qcePGatWqLZ555hm31F6/fr0mTZqk0XPmKG/evGrVqpXefPNny1u4c+TioSLtpiQ4P4WvVl
y8FBgYKB8fn3uGYCtPvKdMmZKox1nVgv9fzpw5o6lTp6pr166W7C+xJ4BW9cTw8vJSypQpVbFixXu2ulrZ2uX0v+G
///6rBg0aaM0GDFL291bHjh0ld0h0tWvXtJNmZNabb7yhbt26qVSpUg9dS5JefvlldejQQQ0bNoz3/tmz22vcuHFa
u3atJfUWLLyoN954I8G5Uz799FPNnz/f0rLTqlvrxqZsya4LGy7du105MgRLVy40LKa7ubu3l6wVvny5fXSSy8l0
P9Ev379tG7d0qlvdrSusk6cEu3Z9Bt06ZNnC/11KLT66uvvLLNmjXdejx2rHuYI0e0eE9oQkNDLTdvXnXv3t22ae
7doVqlapoxY4ZzQoz3339fHTp0cLY4nT17Vi+//LJ27dplSb3ETLhiZUvegQMh9NZbb2np0qUuMxZXqlRJ48aNU65
cuSyrJd2ejC0yMLKdOnVSWhYgifeVrVKTZkyRe3bt9fo0aP15ptv0ieIiomJ0YQJE/Tuu+9q/PjxatGihSX1kPQV
KFBA69atc7byvnm3r//feda+ae0nVK2bNnt2xi0C8vL2XNmLUlatS454WKMWPgWFLv+PHjmjplqiIiInT+/Hk1b
txYrVo3VsGCB53f3x690ihjz/+WJ06ddKwYc0c30bt8KiFXzucP39e06dPV/Pmze0E3IsXL2rqlKnx3veg/muZLq
t77rRu0SJRPQaSamtXkyZnTGPHDv3vf//Td999p7Vr16p0a8iFXzucP39e06dPV/Pmze0E3IsXL2rqlKnx3veg/muZLq
FF3T69GLL6pUtW1Yvv/yyhg4dGu/9/fr1088//5zoC9SJsX79epUv041a9ZU9+7dnb0U7969Wx9++KHz5+VatW
qXTp0pbVTGyPDqsuDLmztldiL9Z29b2UGKd0nbK0N0FiLzBZdaH4xx9/VM2aNdW1a1d169bN0WHxiRMn90GHH+rjj
z/W999/H2fSv4eV7A03JF25ckVLLizR3r17JUmc+fWq6++GmdMgjvYebjHjh0b7+0XLlZQpk2btGTJEi1dutSyZZ
CmTp2aqMdZncPf3eNzQkJCtHXrVmF35JMnTypjxoyWdg/+L3a15J0/f9750s2VK5dtM8/f3eX6zo+B2G2rn2P37t0
1ZswYBQCHK2f0nJJuj3u8fPmy3n77bUvH4s6ePVs1a9Z0BqEDBw8qS5YszlaaK1euaNy4cZaNB/bEerXJ3d3dBON7
32fIkCH0ur0PKjFj5RwOh1auXGLJvRQpUihjxoxq3ry5Xn/99Q57/lvdFXvDhg1qlaqVHA6Hpk2b5tYeXneLiYLJ0
r0zDxkyRNU3b9ec0XPibv9+/foqWrSo+vTpY0k9d/fc8Z05c+Zo3rx5unHjhipWrKg333zTljqZMmXS7NmzVbp0aZ
04cUIZM2bUsGHD1KtXL1vqBQYG6tdff03wPb19+3aVKLXKsrgJ7p47Jdb333+vN998M96GrgkTJqhOnTqW1n3hSF
3niPefd6+bt06Pffccy7DH6z8XgoICNChQ4ecF7arVKmiiIgIZ+8Iq8+3pXv/PmP/rLafP3366afq3r27YmJinI15
Fy9eLLe3t0a0HGn5LPrSYxK4HyV2B07/MmTIEC1fvtyyq5j3mgzC4XAoKipKMTExt02PDQ401rZt22wL3I+DQ4c0J
epxCS399qA2bNigGTNmOC8q5MmTRw0bNrznnetIPwt0XaebNm5fgF/6d69Va0VFMQj1b7uRwOLRv3z5L6rm750dyf9
/HN8/A3V/Hd13Yi460Vr9+/TRu3DhVqlQpTui1sotwfHbt2qXw8HBNnz5dJ0+etGy/Cc0RcTerhnQVLVpUH374oSp
UqBDv/StWrFD37t21ZcsWS+o9DiZ0nKh27dopd+7c8vf3159//qkePXpo+PDhltfy9vbW0aNHlT59ekm3A/HmzZtt
6x5ctGhRtWvXTu3atYv3/vHjx2vixInaunWJfXcPXfKne5u6GLIoTXu/h60WmK+d6280C3dDrrxuXLLisa0HatPP
vLEtn/9tP7880/Lakq3h5TMmTPH5TVap045d3v3inpXlp0hE8++SRRj3v77bdtPhLpqlu3boKt4A8ioTUIjx8/rk
GDBmnpEmqVKmS2fW503d3h5K5D9KJvBjKScvDxDzuDi52X1eMb2iK3evV3usK7MGBDzVhwgRL16dPzPCbpDyG+25
nzpyRw+GwbTLKAwc02LLfxIi0jtapU6fkcDgUGhrqllbmy5cva+bMmQoPD9emTztUsmRjY1sSDx48qGzZsQLRo0Zu
mUBp375991zNIXfu3JZd8JJur5E7ZswY9e/fP94u7E0HD1X37t2dXSQflie+mz799FP17dvX+Xk5efJkderUyZbAL
cllbLqXL5f8/f1tqSNJJRo1Ur9+/fTiY/Gu7JE//79Let1Jd2euHD+/PkJzp0yb94824awBAQEgFatWrbs+241a9
ZUmzZtVK1aNCvnnUBcielNcD/uXj/91qlbmjRpkyNGiQvLy999tLntgw9ypw5c4LVDTsk68CdmC6qDofD0sD9X70

kJscupZGRkRoxYoTGjh2rggULasmSJZZ1X5du/43u/p1a/Ya/k7vHk8Qu0+Z027dvT9Tj r0r06u56nnTs2DENGDBA
U6ZMUeXKlbV161YVKLT8jrvvPNOnNvOnTunIU0G6PPPP1eJEiU0YsQIy+pZeUU7MdZ9vpduD8Pp27evZs2a5bywm
Dp1ajVs2FBDhw61dKZyT130Wrp0qVq3bq2MGTpQjz/+SHCMVqusW7d0X331lb777jvlyJFDu3bt0polaywdwxlr5s
yZioiI0JgxY1S1a1WlatXK1pNwb29vHTt2LMElkI4d02Zp7TFjxujSpUvxjgkPDQ1VZGSxowZY9n7/u4TYXfYv3+
/y0zJTZs21ZtvvqkTJ044W6KtYoxRhQoVnBecrl69qtdeey30HA5//PGHJfW6d0min376Sc8991yCK0tYGQDeeust
tW/fXn5+fvH0ndKvXz+NHZ/esnqSZxq6rl69qpolaypdunRq0aKFWrZsaemypnfzxDw/j4u5c+eqT58+On36tHr37
q10nTpZPteIp/5+dCm32KM4UcyQIU00YsUKY2fcu379usaNG6dhW4Ypbdq0Gjp0q0rWrWtpDem/1wWMjo7W4sWLL
3CnlAXz1hJvSUv9jne6+1v9bJZ7q7n7u7Inlyv9urVqxozZoxGjRqL7Nmza9iwYZb0PJTtYV65csazLoJeXlwoVKuQ
8Sdy+fbvy5cvnPBm0iYnRzp07Lfsbnjt3TqVKldLR0fVvHFj5c+f3znZzzffFKMsWbJo/fr1lq2vOnLkSHXq1Mk5
Fm/t2rUqUaKE83MuMjJSPXv2tPSEuG3btPoyZYr690mjvn372ro+9MiRiZVp0iRdvnxZYWFhatKkiYoUKS5JfX19t2
7ZNBQoUsK320aNHXnyZE2ePFLRUVFq1qyZWrdubfLJePny5VWiRAL98MEH8d7fs2dPbdy40bI1cgsVKqQvvhCL7
30Urz3r1+/Xv/73/+0c+d0S+p5QnxLPNnVjXbQoEGJetyAAQMsq+n0LSUK986dIilRE805HA7LV+r5999/FRERoS
TpujAgQMqXbq02rRpo3r16sVZ8/xheXKeH7u7lHt7e+vEiRP0MdwHISHatm2b8+9q11CuNwVwGfPntqxY4feec
9ezZ07YLfp76+xG4k4GERihevHhRmZt0k8//aQLS5bolVdesaSeMUZTp05V//79FRMTowEDBqh169a2nby5e13AJ
554QsHBWwRooWaNm2qtGnTxvs4qz4M7h5v7A7uHsPt7npeXl6aMmWK828UFhamjz/+2NnV8sKFC2rZsqVLH6ieW
9Wur1265dffqlBgwbJ399fgwcPVPmMtdzeY+LatWv67LPPNGrUKJ04ccKsZfbr7ZLhz585asWKFli9fHqdl7okTJ/T
q6+qQoUKlp2gunueAeL2YJ56dapbJkrz8fFRz549NXjwYJfVbncE7jutWbNGAwc01Nqla3XmzBnLLphI0nfffaeG
DRvqo48+Uvv27Z3P8+bNmXo/fry6deumb775xrIL0YGBgdq9e3eCLEqHDx9W/vz5LZt0S7r92b106VLduHFD5cqVs
/3v5uXlpaFDh7qsF9+z0+9++67Lt/FyX0ooJXcNXfKo2LVqlWaNGmSvv/+e3l7e6thw4Zq1aqVSpQo4e1Du2939w
588cUXNXv27DjrfVvV09DLy0uhoah0c4gLFy4oJCTEGVJj13G38nupWrVqWrFihVq2bKmBAwda3pPLUZGsA/dvv/2
mc+f0qWrVqs7bpb6dggEDBigqKk0la9bUp59+aml3BXcvEyIlfEUxJCRE+fLLU9euXS39oClcuLD27dunTp06qXPn
zgm2aFn5HN3p+vXr+v777zVp0iT9/PPPqlatmlq3bq0qVarYEmTiu6Jvt8GDB6t79+5um8DE3fXcfQXTE+vVzp49W
/369dPFixfVp08ftW/f3vLWkTtdv35dgwYN0tKLS+Xr66sePXqoZs2aioiIUN++feVwONSxY0f17t3btm0wU/bs2T
VhwgRVrlw53vsXL16sdu3a6eDBg5bU80QvjEyZMmn79u22jUu/07BhwzR58mRdu3ZNYWFhatq0qQoVKuS2wH3t2jV
9++23mjRpkjZs2KDX39dU6ZMsbx7Yt++fTV8+HAFBwfr6aefdk5UePnyZb377rsJtn4/iLRp02ru3LkJDmdau3at
ateurTNnzlhSb+3atapWrZp6T0fHx9NmTJFYWFhluw/PtmzZ0/UZJBWt5Bu375df//9txw0h3Lnzm3r8KarV69q2
bJlznP58uRRxYoVLW+J9YRXnLfC+f0tXT4zY0KjIzUN998oz59+ujixYuWDe1s1aqVxo4dq+DgYEv2dy/36h1ox4
oynuil6+XLJR8fHwUGBT7zvX/3rPcPyp1/vzsl68BdtWpVlStXTj179pQk7dixQ88++6xatGih/Pnza9SoUWrbtq0
GDhxoWc3ELBNSpEgR9e3b17Ka7hbf7Lp3smNJKU85cuSIs5tSdHS0mjdvrkGDBlk6yZAnAre7W9U90YrvTp5YrZy2
5IeFhd3z4pZV63P26dNHN332mSpVqQrfvLFZ86cUatWrbR69Wr16dNHjRo1SnBpq6TAz89P+/bti9NyEOvff/9Vr
ly5d03ANuvqesJwe+J9uBgNGk2aNEntffedcubMqZ07d9o2hlu6faE9PDxcs2bNUS6cdWqVSS1btz0v0pbtu23cuF
Fff/21/vnnH5cuiw+88IKldapXr66MGTpQyy+/jPf+Nm3a6NixY1q0aJEL9cqWLaucBBNMBBVB0tMv0/evbV4UI
d0XLEkv0/CjZu3KjWrvTr165dzldJcDhUsGBBhYeHq3jx4pbW++GHH9SMtZs4F0XSpk2r8PBwvfbaa5bWk6RNmzZp
xowZLgE/LCxMzz//v0W1PHE+E5/9+/c7h5Uc03ZMFStW10LFiy3ZtZs/R93d0/Dy5csuvUvcwd0h31Pno8k6cGfIk
EELFixwfqj07dtXa9as0bp16yTdXutxwIAB2rVrL2U1H8VLQnbs2KHw8HB9/PHHLuzP3WuBtmrV6j8f43A4FB4ebk
m9+Bw4cEcT7fWmjVrdPr0aUvXx767+3NCrJzAwd1fio/Kl3Bykph1oyVZNn40V65cGjVqlGrVqQvt27apWLFiatC
ggaZnm2bLLNfly5dPVEvXihUrLkmXKVMmzZo1K8Hxst//LMaMnyoo0ePWLLE4Hbk+/DS5cu6ZtvvtGkSZP0+++/
q0SJEqpbt666dulqWY2CBQvq1KlTatSokVq3bp0sJmG806pVq1SpUiv17txZ7777rnPow8mTjzVy5EiNHTtWS5cut
Wz4WJo0abR27VrnpI9RUVeKQmXvGv+/Th79qymTZtmyTq5u3btUokSJZQ/f3516dLFZd6Gjz76SHv27NGGDRss64
2xfv16lStXTq+/rq6devmXH5s165d+vDDD/Xjjz9q9erVKlWqlCX1JKLHjx4aPXq0goKC9PTTT8sYo/379+vKLSv
q3r27pRNRSp79jLL69armzJmjiIgIrV27VlmzZLXLli3VsmVLS5d6cudzdHfVwBw5cmjKlCmWtQR8KPLUazRZB25/
f3/t3bvX+UZ76aWVKVfXfXr10/S7SVEnnmGUVGRlpWMzg4Wdt37rznGKtChQrp0qVLLtWMz6VLLzRjxgyFh4dr8
+bNKly4sGVR07rbvZaWuHnzppYvX67o6GjLW9Sjo6P13XffadKkSfr1119VvXp1tWrVSlWqVLG0jicmcPDy8tLJky
edE2PYzd313D3TfGKcOnUqSV9wuLsF2N/fXxs2bFDRokVtqXev2XpJP9+sfn+3btlA//zzj5YtWxana350dLQqV66
snDlZwnZh7+6xqnePU42MjFT//v0tf9+vXLnyPy8Y2h1U//zzT4WHh+vrr7/WqV0nLNUvl5eXAgMD5epj45auiz5Y
fWHChAl65513d0PGDecKFxcvXpSvr69zLLlVEprAbPv27YmaHMSqxhgtXbpU4eHhmj9/vkJCQnT690mH3m+9evV08
+ZNffdd3FEL8Yy1a5dW76+vpo9e/ZD15Juj1XNkiVLJkyE0/9bdu21ZEjRyzroTBlyhS1a9f02ZsZtgfSjRs39P
nnn6tnz56aMFGcmjVrZk69fZrZu/evf/5XW/lkMP169crIiJCS2fP1VxR11WzZk21bt1aFStWtKZGndx5PuPulTg
ePXro448/VqdOnTRs2DDLh+A8CtX9PhorWQfubNmyadq0aSpTpoyuX7+uVKLSacGCBc7W5x07dqhs2bKwfflKUqpU
qbr48eIEJ6PYsGGDqlSpogsXLlhW805r1qxReHi4vvvu0127dk3vvvu2rRpo1y5cllWY/bs2apZs6bzbPTgwYPKk
iWlc+zqlStXNG7c0EvXk4zP/Pnz1adPHx07dkw9e/a0bE3XjRs3KiIiQjNnzLS0HDnUokULNwnSxNJW7Tt54mrB3T
NAJ8Sq5VA8Uc+dM80HBATo0KFDzg/wKlWqKCIiQhkyZJBk38ye92J1z5b4WmTdfEIdEx0jzz77T0+//75CQ0M1ZMg
QNwzY0JJ9//vvv3r++efl5+enDh060JfL2rVrL8aPH6/o6Ght3rzZspaSxIxVlaxdr9ud4wGvXr2qFStWqEaNGpKk
3r17u6wL7+3trf79+1s6js7dXRPdvfpCrKNHj2r27NkuXdjrlq2b4HCIBxXfBZr4Jm2y6wLWnYMHnWnSJE2ePNm5e
kCzZs1UvnX5S5ZpffLJJ/XTTz8l2LV606ZnqlatmiXhXrq9x0DatWv1zDPPxHv/9u3bVbZsWeeShA/rhRdeUFhYWI
IXL8eMGa0ZM2dq48aNLtSTXL9742PHKEMvLy8VKVJErVu3tn34SGy90ycWS4gV2cIT54cbNmxQq1at5HA4NG3aNNs
n2fyv5ZRjWZXV3Pn3u10yXoe7SpUq6tWrl0aMGKF58+YpICDAZZme7du305dJsEqxYsU0b968BAP3999/r2LFilla
8/jx44qIiNCkSZMUFRWlsLAwrVmzRqVKlVKzZs0sDdvS7Rmf77ziFtt6HtsVMjIyUr1797YtCP/yyy/q2b0ntmzZo
o4d06pXr16WfsCWLFLSWbNmldtvv63nnnt0kpzDE05kVRdvd88oHaty5cpuHavjznqpU6d01EzzVrL27ZrLSfcvv/
yiq1evujzGHdc24+vZYQx+/fs7u7Zdv35dQ4c0jTMUwqox43f7+uuv1b9/f129elUDBw50WfwCpkzZ9avv/6qt95
6S71793Yz1mpUiWNGzf00m6JVk2+dr9+++03t1zZnzp1qn788Udn4B43bpwKFizonBhqz549ypgo6XrDicmSfS1
cZJk7cWQ+5EpUyLz2/3UqfChTiFXTVq1LBllwbpdm+SuXp6quvvltL69etVtWpVjRkzRmFhYerVq5elk+1FRkBGW
ZHgTunTp7e0B+51a9fu2b1bGhrqclHqYe3cuf0ek2bUrFlT7733nmX1Yn377be2NVDEZ/PmzW5ZeeF0gWYNctS69e
4+RyxZsqS2bNmifv36qXTp0qUqVKc7lorJ4D96K0P3P4c3fn3i5WsA/fQoUNVu3ZtLS1bVkBQZoyZyPLV8FJkyb
p1VdftbRmx44d1bBhQ2X0nDneZUJi11+0Uo4c0VSvXj3nhEaJ6aL8M07+8nVXJ4md03eqV69eWrX4sZo1a6aZM2da
fkU/luHDhzVkyJAE77fyJCMxv7+tW7da3nX33XffdetVU3fW0378uH0m+ZEjR9o+03xi2Fk3vp4t33zzjaUX28qUK
aM9e/Y4t1988cU4MwXb8RwXL16sXr166cCBA+revbu6du2qWMBAY+tItz9Lf/rpJ50/f965hE6uXLncevJot6xZs7

rlffj111/HCYXffPON88Ls90nT9dlnn7kt007atUvh4eGaPn26Tp48ack+rZqo6H7NmTPHZRKs3LlZq1GjRpYtPxbl
LExcUMmXKpAIFCqhJkyb69ttnvRfT7ZgZPXv27Nq4cW0CF9J+++03S//GefLk0cqKXNc6nTFihWWfmZ7e3vrr+vXr
Cd5/48YNW5ZzLV26tFvPLXx8fBI1vMPKC9ANGzZ0230sUKGC23oHxoq0jtapU6fkcDgUGhpqyzwtsVq0aGHbvhpiz
r9frGQduJ988kn9/PPPunjxooKCguJ8sMyZM8fyFrc6deqoR48eevvt9W3b994lwmX+ksxW7ZsWrdunbJmzaps2b
I5u0ImF0e0HFH//v01ffp01ahRQ9u3b3d0NmKHW7du2bbv+DRv3jze5UAuXryor7/+wL999ZW2bdtmaSuCu00nu+u
LSJFCDRo0UIMGDZwzXfs2NG2meY9wd09W1avXm3p/v7Lxo0b1bNnT23YsEHt2rXT8uXLbe+pECt16tSWzzAdn1u3
bmny5Mma03euDh48KIfDoRw5cqhu3bpq2rSpxy40WeHvv/9Wnjx5nNv+/v4uF4Nfe0EFdejQwdZjuHz5smbOnKw8
HBt2rRJJUuWtGzo0Z327t2r+fPnu/wNa9as6by4YJVb24pLCxMc+bMUZ48eZQvXz4ZY7Rz5041aNBa9erV04wZMy
x73XjigsLNmzfLcDjkDhsCYN3atCggbp27aq8efM6J4aLtWPHDnXv3t3S5Y9atGih7t2766mnnlK1atVc7Lu4cKF
690hh6Qo2zz33nL7++usEGw/c0V04PjExMZ+/xYtWtStS2e5+3PZ3b0Rly5dqtatWytjxoz6448/bM8UQ4YMUePG
jRP8vLx06ZI6d+6sSZMmWVLPY9+r5jF38uRJW/b722+/mbfffttUq1bNVK1a1bzzzjvmt99+s6WMMcasW7f0tGzZ0
gQFBZlnn33WjBkzvxj4+Jhdu3ZZXsvhclJ83oKCGsy+ffuc2yd0nDBeXl6W1UuZMqUJCAGwPXv2NPPnz0/wX3KxYs
UK07hxY5MyZuqTL18+07dvX/PHH39YwUuv+Gdbt68aX744QfzxhtvJNl68dm/f78pX7688fLYMmfPnrV0315eXub
UqVP07eDgYLN//37nttXvCWOM8fPzMO2aNDGLFy82N2/edN7u4+Njdu7caWktT3A4HCYgIMB06dLFjB07NsF/VqLV
qlai/lnl1qlbpnr16sbhcJiiRYuahg0bmgYNGpjChQsbh8Nhy/uhXLly5vz585bvNz7+/v7mr7/+SvD+3bt3Gz8/P
ltq//zzz6Z58+YmKCjIPPPMM8bb29usW7f0llrDhg0zPj4+xsvLy6RPN9489dRTxsvLy/j6+ppRo0ZZWuvDDZ80ad
KkMQsWLIhZ3/z5802aNGnMRx99ZFm9qKgo89Zbb5mMGT0aJ5980oSFhZnTp09btv/4XL161UyFpt2UL1/epEyZ0tS
uXdvMnTvX+Pr6Wv65dvXqVfPiY8ab29vU6VKFd0LXsftPUSuXU7lyZePt7W1KlSplrl69a1m9mzdvmrp16xqHw2Hy
5cvn/EzJmzev8fLYMrVr13b5LH9YCxYsMN7e3ubdd981J06ccN5+/Phx0717d+Pj4xPva+lhZM+e3Zw5cybe+3bu3
Gm6d0li0qVLZ2nNgwCPJuqfVe51PmM1d9Yxpg333zT+Pn5mUGDBpmYmBi31HQ4HCZnmjRm2bJl8d5v9fnTvX6n58
6dM5988okpUqSIZfViJevAntJlSpeT4MqVK5tjx445t+04Cfa0yMhIM3HiRF0yZEnjcdhMuXLlZMSJE11+Dw/L4XC
YqV0n0oNuQECAMThxonN7ypQplR85/uuFHX/H2bNnm1q1apmCBQuaQoUKmVq1apK5c+ZYXscYY44cOWKGBlicuTI
YdKlS2c6duxoa3A6ePBgnC/2v//+2/Tq1ctkyJDB+Pv7W3rC7+56sa5du2a+/vprU6FCBRMQEGDq1atnfvrpJ8vr0
Bw0kypVKpM6dWqT0nVq43A4TghoqHM7VapUlR9G8+TJY7Jn/3/t3XLYjen/B/D30RWVYj6WpJK20SCMraEyirKFUI
S2IYx9KYxdTHxLG3udyhZRLmxZSpYkV0VJIYRCVnQ13L8/XJ2fU51E9zmnTvfrurqu0ed55vnc6izPvX0+GmTJkiX
k8ePH/0dF+brJyckhy5YtI506dSKNGjXid2hWrVpFcnNzqcZSV1cnGhoaVf5oampSi2dvby/w06BBaZJ690gKz9PC
4/GIsrIyCQ0NrXDsyUrRfLZmfj5+VGLJ0x+fj7x9fUL03bsIImJidSu27FjR3L8+HGhx48ePUq0tLSOXSOEEA8PD
6KrQ0tUVVXJggULSHR0NCFEd0+J0NBQWuVyyYoVK8inT5/4z3/8+JEsW7aMyMjIKPDwcGrxfvvtN+L7S30uJeXFz
EwMKAwb8GCBURRUZH89ddfZ0bMmaRfixbE2tqa2vW/5+nTp2T0qWkXbt2hMPhkPHjx50LFy9S7QgUFhaSf//9L3T
p0oUoKCgQBQUF0qVLF7J+/XpSUFBALc63jhw5QkaMGEH09fWJvr4+GTFiBPH39xdJrG3btpEGDRoQLpFL/z4qGxCi
0TgdjTHZ2Ntm3bx/p3bs3KZGRiUZGRsTT05NqDFF8/9QWXC5XrB3uTp06kXv37LV6TFSTIXw0hZg40BA50bLkXxvi6
KtdunSJ2nJYEHL5edKuTsyay9Ys6jGk0kt5deqctmnThuoSYkmUCRHM8ePH8Pb2xoEDB/Dp0ycUFRVRua4kyLjK7
BlewkJCXj69Cn1ZXuWlp4aceMghg4digkTjMDw4MMGkZGBNjwYmJiqCaJKS8/Px8BAQHw9vZGZGQkSkpKsHnzJjg
60opkCZ044ok707y4sy0XuXnzJry9vfmvVTs70yxatEgk2y6+fPmCvn374tGjR7Cws0C/Lx4/fowLFy6gW7duuHbt
Gr/0TF1X/vuCNnNzcwWYMEDoEud169YhPDwcISEh1GIuXLgQX758wdatWwF8/Zv26tULcXFuFRURHFxMS5dukSLD
vDs2bNx+fJl3L3t3D/Ly8gLH8vPz0aNHdwwc0JDfFhpkZWxh6uqK1atXCyxHfVn6bhx49CkSR0hZZ6mTjM70xs+P
v7U4mnoKCAJ0+eCC07+vLLS+jp6VVI2PiztLS0407uzq8EEBUVBSMJixQUFIh8ufe3SktLERISAm9vbwQHB0NJSQk
fP34UW3xxefbsGf766y+EhoZSve7r169x7NgxfL4KHR0dB49mmoSyPJu3LgBLy8vBAYGQLNTE/Hx8QgPD4eRkRH1
W0IuneXo6PjdczgcDpUSKlVLK58tLcXZs2fh7e2NkydP1jgW8PU7oXxZzKSkJPB4PPj5+SEjIw0DBg2iFg/4/7/fp
UuXMGXKFFhbW2Pfvn38doiqysurV6/g4+MDHx8f50TkICMjAwEBARg9ejTV0HzUu/C1iLiXpPff5HK5Yp+NrUpRUR
EJDAwUa8y6TNzL9mRkZMjcuXMrzC6Jcqby9u3b5K+/iIqKiqr48eZMuWLSQtLU1kMcUdj8PhEHV1dbJ8+XKxbEM
oKiqidq2fIY6VLVu2bCGtWrWqdJnw48ePSatWrci2bduoxTM1NRXb8ufKlP++oK1Vq1bkWYMHQo/fv3+ftGrVimrM
Tp06CbzueTweadq0KXnx4gUpLS0l9vb2xNLSkkqstLQ00rp1a9K+fXuyYcMGcvLkSXLq1Cni4eFB1NTUSJs2bQSWu
dLg7u50tLW1iZqaGlm0aBF5+PAhIUR0n6UaGhrk+vXrQo9fu3aNaGhoUIvXtGLTEhMTI/R4bGwsadq0KbV4cnJy5P
Xr1wLPycvLklevXLGL8aM+fPhAVq9eTe16AQEBZPz48WTmMDFkz5491K77M6Kjo6neHzo40JDPnz9Tu15liHuVCSH
ix3ZtZWU19GfYsGFEQUGB2t9RUqsD8/Lyik+vL+M+nXrx+Rk5MjXC6XbN26LWRnZ10P9e3f7+7du6R9+/akV69e/BXJ
tPtq48eJWZmKZRRUZFYw1tKydpKsLCQFvx2LmbsqD3HvJXhK64unsLCQ/zg50VLgyVVubi7x8PCGfP18K7aC7vq
arDJI0k7iX7UVERBZFY2eioqJCevbsSbZv307ev38vd0je/jIwMkTnUtoX0k6hiijueuLchtGZksyfp18K0RN+vH
x8PJk/fz755ZdfiKysLLXr9u/fn/z3339Cj2/bto3079+fWjxx30SVJ+o0t5ycnMAWp/LevHLDGjRoQDWmsrIySup
K4j+2sbEhf/31F//xgwcPSJs2bajFe/780Rk0aJDAIDSXyyWDBg0S6e/26tWrZNNkSaRRO0akc+f0ItvDraCgQFJS
UoQeT0LJIflY8tTiWVpaEhcXF6HHp06dSm3AhJCKuSkI+fq++DY/hTilpqaSmTnUvud7tmzh3A4HKKjo0M6d+5Mu
FwucXNzo3Ltn0G7wy3u5ciEfP2uX7JkSYVL/6LucNMCP5ZJ0+eJL/+itp0qQJWb9+PdVri6sDL07JEUlqfte/e/
e090vXj7Rp04ZERKZS76vJyMiQxYsXVxiMYh3uGpBEIiNJKP+hqqysLPKBBWHy8/PJ//73P6ozM+LuPMnLy50XL18
KPf7ixQuqN1FlcnNzibe3NzEyMuJ/oG7ZskUKI9RmZmZEWVmZjB8/npw/f56UlpYSQkT3gSPue0K2bt06oq0jQ7hc
Lunduzfx8vISyUjwj/jy5QvVLS0tWrQgjx49Enr84c0HpEWLFTiSxHu7L0zLdE8bnduHFjgZU0GhoaAo0LycnJI
vls+/jxI7l9+za5ffs29YSF33r27Bn/s4UQqj5//kx27dpFevbsyU+CtWnTJmrxvvcapf03vHnzJpGTkyNjxowht2
/fJlLZWSQzM5PcunWLWftbEzk50aoDCxw0h1haWgokDZSVLSXm5uYiSSRICCEZGRlk/PjxpEWLFqRnmZk69atpKS
khCxbtowoKCiQHj16kMOHD10JZWBgQP755x/+Yx8fH6KkpETL2j+DdodbEp+h4l5lQsjXf+dvv/1GDA0Nq/wRLRs3
bhAjIy0iqKhIFilaJJDPoabE3QEW9+QIIZUPDBUVFREXfxcily9P1q1bR/V98ddff5HGjRuTvn37kl27dvH/XqK+H
63bdXG+gxACHR0d/l7bnJwcGBoa8vcgExFsX5fEHu7y/w5R/Lu+9eXLf6xatQoXL16EnJwcFilaBCsrK/j4+GDp0q
XgcDiYPXs2tXjilT0loKCAzMxMofvkPn/+XGkZr5pSVFSE06mJHB0d8eTJE3h7e+Pff/+Fm5sbzMzMcPr0aWqxLL6
8yC+XNW3A00PNmZ2PcuHEARFMyQdZxxG3x4sVYvHgxrl+/Dh6PhzLz5mD0nDmwtraGs70zSpafY+cnBxGjRpF7XqZ
mZlo3ry500PNmZdHVLYWtXgAKJ2dXWHL/b3kqKipUYpV/f5WwLUKLSt490iRwPPDhw+nEo8Qant7ezBs2LDS44WFh
VTiEtPTw/BwcGYN28e4uLi80rVK5iamvKPv3z5EqLataIetlmZmIps6atrS2wL9PZ2Rnbtm2Di4sLHj58yP9MnT
dvHrWYXl5eQvNPZGdnU4sDAH379sXRo0cxZcoUBAYG8p8nhKBZs2bw9/en+lLTwc4J0zs7atevzJILS3Dt2jVMnjw
ZFy5cwNy5c3HhwgUUFBTg/PnzMDY2phbr+fPnAjWxJ06ciClTpiAtLQ2tW7emFkeSxP39umTJEixZsgTh4eHg8Xjo
3bs3tLS0QAHBKraGyOKKu3QWAMTFxCHNZ00XLlZApEmTc0TIEBr145qjL59+2LmZJmIioqCrq4u1WtXZsCAAfD29

sb79+8xceJEDBo0S0Svoc6LLKystilaxcMDQ0xa9YsqvH27t2LrVu3IiAggH+/NmjQIBBCRNrfk0qkaZJIZMTlCg
XqAZa9UL/9NdNOKFad5HA0Ew4sWbIE03bsgJmZGW7evIn09HQ40jri6tWrWLJkCcaPH1+nEycNGTIE7du3x65duyo
97uLigpSUFJw9e1bkbSkpKUFwcDB4PB7VDnd5ly5dAo/Hw8mTJ6GmpgZra2tYw1uLrEanq0Ndu3atWuf179+fSrzy
cnNzceTIEfj6+uLmzZvQ1taGk5MTFiLaRC1G2WdNVTgcDoqLi6nEk5GRQVpaGlq2bFnpcdqfM9/79xHKtVXFqZy2
xv9qvj4+FCJBwCBgYGwtbVFv379EBcXh99//x3BwcH8466urkh0TkZAQAC1m0L0ve9CACgqKqL2/aShoVGtm9Hk5G
Qq8crk5eUhJCSenwRLV1cX5ubmIhkIFjdldXV4e3tj4MCBeP780Tp27IhZs2Zhy5Yt1GNVlpBKlMkSDQ0Nq3y950X
lISkpiepnWuPGjb/7Gv306R0VeJXJzs7GoU0H40Pjg3v37qFnz56wtram0uhVVWIXuUHJScHy5ctx80BBDB06F0vW
ra0epLSMubk5IiMjMWzYMIe0sCiT6pZnjvj4+PANR3bu3CmSZKwAsGrVKixcuBCKioqVHi9LDkurDnd5ZUnh9u/fj
5ychAwZMGtW1tZUJyWAKe9wS8LLly/5/00IgYGBAc6d0wd1dXWB88o/rglxd7g7duyIjRs3YuTIkYiJiYGHoSHGjR
uHAwc0QFaW/qKJp0+fIisrC927d+c/d+XKFaxduxa5ubmwsrLCkiVLqMWLiIiAiYkJrKyssGDBAoFszJs2bcKpU6c
QFhZGbSahpKQEcXFx0NbWrnDDlJ+fj6SkJHTq1EksWWEzMjJw6NAheHt7IzY2VuSZ5jMyMnDw4EHweDyq8arqPJXd
fNDsjFbl7NmzmDRpEjIzM6n+Pk+d0iX0WEREBLZv3w5CCLWMxVwuFwYGBkL48XFXiLi6P6NwwMDPxuZnmaM1612
evXr9G2bdtQDQxU5fLLyzh79ixat26NmTnnCtzkrFq1CsbGxjAxMalhayWj0h3uuuz27dv490kTLCws+M/5+fLh5c
qV/0/C7du3C101UR0ZmZl4+vQp0Bw0tLS00KRJE+oxgK8rc16+fIm2bdsC+LryKyoqCgYGBtRjcbLcrF27VmBm1NX
VFQsXLkSLFi34z9GaYVu1aLw1zluxYgWVeFwuF1u2EHjxo2rPI929QxhylaZHD58G0/fv6d2XXFnKvDUVASHw8HM
mTPRt29foefRWg0l7g7wt8Q9GV0Zjx8/4sCBA5gzZ45I43yb9f38+fPUV5nViw43IQT37t3Dixcvw0FwoKmp+d2RR
lrE8YXP5XLh5+fH/1C1tbXFLi1b+EsDMzMz4eDgQ01GuGHDhnj27BL/6Yy8vDwiIyPRTwtXKtcbv+TIkTAwMMCaNW
sAfJ0t6NSpE/r16wc9PT3weDysWb0G6pvxxIkTmDJLSoWR36ZNm2LPnj1Uywb4+vriv//+w+3btyt0qktKStCrVy/
MmTOH+lK+0tJS+Pr6IigoSOC9MXr0aEyc0BHR0dFi/VC9f/8+tXjCljbn5eVh69at2LZtGzpp06FBhuTAteX150Hr0
KHx8fHDz5k1oaWnB0dFRaAkoWhISERB48WIEBwdjwoQJWLnmjdCtET9KEjeL4py1+FFDhgyBL5cX2rRpI5Z4Kioqi
I60lpr0oyiUX4WhrKyM2NhYaGpqSrhldFhYWMDEXASurq4AvnZgunfvjstMTJ0NfXx8bN27E1KlTsXLlSmoxX7x4gR
kzZiAkJERg5d7gWYPx33//QUNDg1osQLx/w+qsU0Bw0Hj+/Dn12NVx8+ZN90jR46cHUGrjZ2hpaSmePXsGbW1tatc
U979TkqVxJdUBftXkiDCEEFy8eBHe3t44deoUVFRU80HDB5HG/Nb79+/pv55Etju8lggNDSWampoVsqrQaWmR8PBw
kccXdeIdQsSfVKyy70+izFrar107EhErWx+8Zs0a0qVLF/5jLy8vgce050bmkqCgIOLh4UE8PDzIiRMnqGZfL/PHH
38Qf39/ocePHj1K+vXrRzVmaWkpGTJkC0Fw0KRr167ExsaGjBs3jnTu3Jlw0BzqZSYSEx0JjY0NycrKqnAsMz0T2N
raivR9ULJSQvbt20fatWtH2rdvT3g8XoVSGzRcu3aN0Dg4EGVLZaKoqEgmTZokls+ZN2/eEGdnZyInJ0eGDh3KT1Q
jSTdu3CAFBQU//f9L0mna94jjs512PA8PD5KXl8d/HB4eLvA3+vz5M5k2bVqNYkhs+SRfLSX4opnky8LCgmRmZvIf
r127VqCUXxp60tHX16cWr3Xr1uT0nTv8x0uWLCFGRkb8xwEBAVTjvXr1iRq1Yq0a9e0rFu3jpw4cYIEBQRd3d30
q5d09K6desqs7T/DHH/DWuz8glwf5QkspRzuVwya9Ysod+vokGmZycTD59+lRpz0Li4krv0+q6T58+kW3btpGuXb
uKpfnzVx3RHbt50RksmzZMqKmpka4XC6Z0HEiuXTpUoWs9zVRULJCymNj+Y937dpFtm7dyv/ZsWOHS04PpbrDnZS
URBQVfYmpqSk5efIkSuHIIIE8fPyabGYeH2iNNGR50Q3T0K+KRMHdDdpk6dSub0nUvmzpj1LGjRoQBwdHfmPy35o
KV/3C8CAAQKZRZ8+fUoan25MLd6VK1eIvr6+0M7hr7/+Sq5du0YtXsuULylcrLQ48+fP6ea/ZmQr/V3LZWVShoa
IVjV65cIcrKysTPz49avL/+ossXLh06PFFixZVWe6mJgIDA4muri5p1qwZ2bhxY406gcKUZwblcrmkZ8+eZPfu3W
L5ks/MzCSLfi0iCgoKpE+fPlRflzVV05tFDQ0Nkp6eTrFFdNXFDndtqmgHCvb29tX6oUXcv8+GDRsKfBcaGRmRNWv
W8B8nJydTzblt40BA+vfvT/Lz8yscy8vLI/379ye0jo7U4hEi3r9hZGQk0XfunMBzfn5+RENDg7Rs2ZL89ddfIvm+
qK6avucLMWjJ4XCIsrIy+fPPPytSJCWlkY4HA7VmEFBQURbw7vSCZHC3Fyio6NDTP8+TTVmbSLKDNB5tDPPe0JlQ
UEB0Xz4MBkwYACRL5cnI0e0JMe0HRNZ1vBDhw4JLDBVULi7dq1IxoAGkRDQ4MoKSkrLy8v6nGlusM9Y8YMMmDAGe
qPLZaWkgEDBpC///5bpg0QZ83Kb290X716RZYtW0YWLxI/Sbc2NiYmJiYVPljampKLv7btm3J7du3CSFfR6ZUVFR
IchAw/3h8fDxRUVGHfM/YsGHE09NT6PGtW7cSKysravEUFrvJTEyM00MxMTFEUVGRWjxCvpbqqp0pLu70ze3N6cw
TldXl0RFRQk9fvfuXaKjo0MtHiFfa/H26tWLKCoqksWLFwvMRNHwokULMmf0HLH0LHt4eJBmzZqRX3/9LZw8eVJsc
atLGgcbv1UX09yVrU6Spq63uIn799m+fXv+ipnCWkKioKBAL++zD8eGxtLmjZtSi1emzZtyPXr14UeDw8Pp1q3Xd
wGDRPe/v33X/7j2NhyIisrS5ydnccmTztI69atyYoVKyTwvrr4GcrLcklkZCTp0qUL0dTurPCdKIrPGDMz7Jv3z6
hx729vanez0ybNk2g70f+/fsFHmdkZBALCwsqsWrbqiRRdLibN290+vXrR/bs2SNQUk1UHe6BAwckLBYs/z7btWsX
MTExoR5XqjvcnTPlqnJU6/TP06RTp05UY3bt2Lwg7p+MjAzp1KmTS0sBxsbGEnVldcLlcomuri5580ABadWqFVFSU
iIqKipERkaGnDhxgmpMcbK1tSVDhw4lr169Ips2bSJkSkokJyeHf/z48e0kc+f010K1b9+exMfHCz3++PFjoqamRi
lely5dyK5du4Qe37FjB/UL86latSIPHjwQevz+/ftUa6nLy8uTFy9eCD3+4sULoqCgQC2ehYUFadCgAZk6dSpJTU2
ldllhBgwYInAlpX8vdLXVFQk4cPr7DcsjYsvazpzeL3aqqKurbq97A0Nypu3+eUKVP4KlNmzZtHmjdvTgoL/nH
Dx48SH06EETeXoMgDapCmp6SkkIaNGhALZ64iXuJ/o+qix3usvdEXL4eGtT2LFFSUIKBgYH846L4jGnTpg1J5koSe
jwpKYnqwJA4V7bUtlVJouhwN2nShPTv35/s3btXYGwgqDrcqqqqJD06mv+4/PssPj6e6sBLGamuw/3q1Sv89ttvQo
8bGBgIZBwnwcrKSuDXiBEjqF6/MosWLcJvv/2GgwcP8ssUWFpawsvLCwAwc+ZM/PvvvxXaVle4u7vDzMMGhoa4HK
52LZtGxo1asQ/fuDAaQwYIMBavHfv3LVZNkZWVpZq8obx48fjn3/+Qd++fSvUZ4+Jichy5cuplPMCvpYBqarebqtW
rajWzGzcuDGePXsmNDv/06dPqdVTBoALFy5AVLYWR48erbLEealyKFeVxhXia0nh4QfbW1t+Jt/i4mI8efKESqwyk
yZNkooa5sIMH5zcqv99P4r9LmofDodT4e8iyr/T2rVrMwRUKBgbG0NJSQl+fn5o0KAB/ziPx405uTm1eG3btkVcXJ
zQ2sKPHj2injQwNTUV//33H9zd3QEAf/zxB/Ly8vjHZWRkcPLKsaiqqT4V4kZGhsD3YHh40AYPHsx//PvvvyMLJaX
GceojBQUFHd16F0vXr8e4ce0wZMmSaife/FEZGRlVvhwpKiqiej9DyuWaLv+YJnHGkpTU1FQEBgbC29sbs2fPhoWF
BezS7ET2WZqeni5QmeD58+d03rw5/7GcnBxyc30px5XqDnd0To7Qum7A19T+336Q00ARq++PuHPnDkJDQ9G5c2d07
doVe/fuxftP0/mZFGfOnInevXtTi/frr7/ixo0b/HI9U6ZMgbu70z+r6Pv376GhoUhtd6upqYnHjx8jPj4eLVu25J
cLKBnQ1SghNwQ/Q1VVFQ8fPKThjh0rPR4bG0v1JmPu3Lk4f/48unfvjoEDB0JPTw8cDgePHz/G5cuXYWRkhLlZ51K
LB3znfL5VCTcZGRmqJbP69++P7du3Cx0Y2bZtG/r160ctHs3axdUhiS9FX19fkceQJJqZlqUBrdeUL5cX/2ajuLgY
vr6+/BJI2dnZVGLUF4Q02Nvb87NIFxQUwMXFhT8gTLusTMuWLXH9+nVzWVBSumpQLWLye0Cdxi1tSIES0wc0FCd
0vWjf/9Xub9+/dwdXWLpPC/c+d0ZGZm8h/HxMTA0dGRf79x/vx5bN68Gf/73/9qHKtVq1ZITk6Gmpoavnz5gvv37w
0vCr0zs6nVbP8Z0jDItnjxYnTp0gUTJkxAbGwsNm7cSD2GhoYgT769cZ09vUqP3717L2opXmn2+fPnKo+L4jtcXl4
eEyZM0IJE/Ds2TP4+PhglqxZKC4uhru70+zt7TFgwABqpXFbtWgFJ0+eQEtLCwAqfLY9fvvYrVu3phLrW1JdFozL
5SI0NFRoHdF09HSymZLRTW//vVTyxcXFuH//Pnr27EktprjrcJePV75czbt379CmTRuUlPZSiSduM2f0xNwRv3Hnz
h3Iy8sLHMvPz0fPnj1hamqKbdu2UYtZVFSEzZs34/Dhw0hKSgIhBD060hg/fjzmzJkjMITBA5fLhYWFhdByI4WFhb
hw4QK118yDBw/Qp08fDB06FISwLYKuri6Ar2WsNmzYgLNzyIiIkKsZchoEvd7sC6oaRmr0NBQ90/fv8qBIUlav34
9pk2bRqUeMSEEHZ9+BIfDERhp/1ZKSgratm1bo5u06pRBAr6WxmS+z97evlq/T3EPANKSkZGBXr16IS0tDXZ2dvw0

TXx8PA4fPozWrVsMjJ5S6D3Wz+jaT5s2btwIMzMzABU/S0NCQjBv3jzExcXV0NbUqVPx80FDeHh440TJk/Dz88Pbt
2/537eHDh3Cll1bc0fOnRrH+h1sY68sJrYiYmJsLKyQl5eHlJSUqh+Fy5duhQHDx5EVFRUHZV7aWlp6NWrf+z57P
irJmpKnN/3kri/r+ozjRAispJn3yotLcWFCxfA4/EQHBwMZWVlpKenU7m2o6MjnJx5gps3b1Y4RgiBkZERv+QwTbX
zToaiP//8s9KZAQ6Hw3/h0NSmTRuBDxt9fX2EhITwa+F+/PgRffr0of5iFeeytvKE/X5pcXR0rPT5xo0bQ1dXF3Z2
dLRH9f/55x8EBQVBR0Chf//9N3R1dfkzzj27EBJSQmWLl1KLR7wdQnLokWLqC8dF2by5MnfPWFSpEnU4hkaGuL48
eNwdHTEiRMnBI41b94CAQEBdbazDYh/aSkAjBo1qlrnBQUFibQdwtR0LNFmZezgs7R3794IDAYkspS0KqGhoRVq01
tbW6N///4C5ylevLjGsdLS0rBo0SKcPn2aP30goqKCKSNHYv369QI3j2pqajW09+LFixpfg/L/0r7KpGnTprh9+za
WLFmCI0e08GeemzRpgvHjx8Pd3Z1qZxv4+hotm3kCvn40fLUFTFDxL9qAkLiX6H8rPT2d/xmjoaFR6UBbXVxxIuxz
X0dHB7dv38b48e0pL9N3c3PDqV0noK2tDTs704F7tk0HDKFNTQ1ubm5UYy5fvpY/gvbLly9wd3dH48aNAYD6yLlXr
koKCwuJ2fxfvYwLpCUtLS3z48AEHDhygdu2LS5eiW7du6NWrfXySWAAAdHR1w0BwkJCTgf//7H548eYL9+/dTi1
dGqme4q7s/m+ZSk+qMRtGe/S0/WxkchiWBAWYILGuJ0Vsp7hG3kSNHVvp8ZmYm4uLiICcnh+vXr1MDbX758iWmTZu
GkJAQ/hcIh8PBoEGDsHPnTmhoaFCLVZ/k5+fjwoULePr0KX8W39zcvMqtHz+jad0m1erw0trDLe73IAA40DhU6zxR
zK5V52axpr730SMKLi4u2L3L5o2bQodHR0QqPcuLITmZExMnz4d27dvpXbr8+fP6Nq1K3JycjBhwgTo6emBEIL4+
Hj4+/ujad0muH//PtXBRIYuYYPB3+Jw0PD29hZda0SLEMLPXdkYzUuRDSGqKSnh+vXrMDQ0rPT4gwcP0K9fP+Tk5F
CLKWYJ/qdPn6CkpER1hVlCXBmYTztWYXbN2NgYu3bt4q/+kmavXr3iTLRkpWVhcWLF+Po0aP8/dpNmzbFuHHjsg7
d0iorkcqYmJHu6/VPo/NaH1cLZWdnCwzcLlC6t+DUVFRsLe3R0JCAv/3SwiBnp4efHx80KtXL6rxACnvcP+o6d0n
Y/Xq1fyRo58hiaW14r7xLpGRQVpaGn/fg7KyMmJjY6GpqQLAvMtn8/Pz+cmjqqk09bMyMjL4nUNtbW00bdqUegxxd
w7rAz8/v2qdV52Z/uuQROf3+fPn/ESC4iL0m0Vxd7hPnDgBGxsb7NmzB5MnT+a/J0tLS+Hr64tp06bh2LFjGD580J
V4a9aswf79+xEREVHp/lgjIyM40DhgyZILV0IBQPv27fHgwQP+AMl//2HSZMmUU1YWJ9wuVyoq6vD0NCwyHud5Vf
1MMJ1794djo60mDFjRqXht23bL9fX9y/f1/MLau5tLQ0GBgYoGXLlnBxcREYZNu3bx8+fvyIR48eVbktkakaIQTP
6ekghIh0YEhcnj59KjSfKcGqQvC//0PJ0+eRFFREQY0HIjly5dX2F5JU3R0NJYUxYqzZ88C+Ppd/+0AQ6Hg8jIS
PT00YN67AcPHiApKQkAoK2tLXSGjwbW4f5GTfccAvVjLyeXy4WBgQF/b2VsbCz09PT4o8DFxcWIi4sT27/x7t27GD
VqFF69eiWwELSJu3MoCatXr670+bJtAebm5mL0AJfX6e1dX9wdZTFkZdu3Dhs27atyuzzNSHum8XyA3sqKiqIiYn
hD+zRNnz4cHTq1Anr16+v9LirqysSEhJw6tQpKvF69+6NqV0nCh2s4fF42LdvH27dukULHvD9/BvMj5k+fTQ0HDMC
9u3bw9HREXZ2dtSXWuEuaFhtTosNDu/GzduxL///ouwsLBKq3YMGDAAbm5uWlhwIbWY4uLq6orLly/j5s2blEaH+
e0PP2Bubi70M6guYBMIX925cwe//57ja/D5XKhqqoKU1NTDBgwAKampiJNALd+/Xr8888/+PPPP6GgoICQkBBMmj
QJe/fuFVLMjycnd0zYkb9NS1lZGXv27IGqqioIIEdeXCEUF1WLgmsw/0NGjMoMjIySExMRMuWLUeIgZqaGm7cuMF
fgvzu3Tvo6enV6Q53dUs7iCtj+/Pnz9G1a9fvZldkJEfYqGfMzibevHmDTp06ISQkRCwJ+/Hx8fD29sbBgwfx7t07
kccTFXHPAiV7ZvF7A3tlaN3st2vXDKFBQUITWkZFRWHUqFF4/fo1lXjNmjXDrVu3hK4KEhIQN++fanemEpimb60K
ywsRFBQEHg8HiIiJbKyBA40TnB3Ny8zs+ufftdTwjB+vXr4eLiUmFQgeZ3fdmsWkREBMzPj7cRMSEnDp0iX06d
MHV65ckWj28J/VrVs3uL5YezYsZUEP3LkCDZs2FAANZ+/LSGICQVNTs9L3WtmA/oIFCQy05qTKwMzGRkoKjwn4u
0jSAYZctw7tw5KvF5169fR3h40K5evYpbt26hoKAAZdu353e+TU1NqeY10dXVxezZsZf9+nQAX0sWllZIT8/X2Sf
Z3p6eti3bx+/Uk3576Xbt29j7Nix1Mo4z5s3r1rneXp6UoLXhnW4v0Hj5qN8hr/yidnEleGvPjL48CA2bdqEBw8ES
LopzE9ITU3F+PHjoaWlxa8dT1t0Tg60HDKCb29v3LlZB71798bo0a0p1lStJ3F3nsR9syjugT15eXk8e/ZM6M3Lmz
dv0LFjR+Tn510JJysrizdv3ghdkZCWloZ27dpRLc/H0tyi9fLLS/j6+mL//v0oKipCfHy8V03BF9fr5cuXL/D09MS
RI0eQmJgI40tyT1tbW8yd01dodY3arkmTJrh7967QJcJPnz5Fjx49BMqisZuioiKkpqZS3c09devWSp/PzMzEnT3
EBISgosXL8LU1JRKvNevX2PcuHGijIyEjIwM/v77b6xdxYuLi7w9/fHiBEjMH/+fPTp04dKvDJFRUW4desWrl69i
qtXryIyMhKFhYXo2LEjnjx5QiWgVlW8EhMT+X8f0gjk5eXx/PlzkSusbSoEeLj4/kz95s3b4aTkxN/q90rV6+go6
0DgoICKvGq8zrgcDgIDQ2LEq9M3V1PWUvVlgx/oiTucj2xsbGVPp+vLYU7d+5g3bp1WLt2rVjaIgrCRme/xeFw80z
ZMzG1SLzatGmDtWvXYuLEidSvfePGDXh5eSEwMBCampqIj49HeHg4jIyMqMcSN3FnRn+/HmVmeR790iB58+fU4v3
ox3pmzdvokePHj99M/7ly5cqkyPJysriy5cvP3XtyhBCqtxGUVZJg7aqMt6WmTVrFvW49UHZe5IQumfLYtYGDRo0g
JubG/XM0pKwnZ1dZb4EZwVlqsnagaP4+Hh069aN6qTT7Nmzqzy+Zs0arFy5klqH283NDTK50di6dSsCAw0xdetWhI
eHo0uXLkhMTBTztic50Tn0798fv//+0/r06Y0QkBDs27cPT58+pRbjy5cvAjP2HA4HDRo0QGfHbUY5TVs2BCvX7/
md7jLT4SkpKRQTawrqX4a63BT9uuvv1ZIGCNtXf2up2vXrkJvPlu2bAlXV1e4uLiIjLY4zJkzR+ixFy9eYM+ePSL9
sKsNVFV8f79e2rX27BhA3g8HnJycmBra4sbN26gS5cukJ0TE0ni00kghMDe3p7fwSwoKICLi4tACR2AXlmw2n6za
GFhUeP9yMuWLRP6u0M71EhZlN5hgySi6Gy3b98e+/bt4z9u3bp1hX1xH6Hdbb/wLdLym/cuIGHQ4fiv//+w+DBg8
Wel0Ka50fn49K1S0hMTAShW4G0jg4GDhwo0Bmo17Kzs4UmoP8+hNI3vflnbW1tdBZ8H8RFhGaGIAAGbKZwdaGm3
btsWYMWNNENKBUUFCAiIgThWf4erVq7h2w5W40NTX5yUqNjY2pxiv/PV1+7BlAd7m1oaEhTpa48KXijJCgoiGoysZlZ
5sDZ2RkGBgbUrLkdrMNNmaqKoYPHw4nJycMHjy4zu/hqkz5L4S4uDiRdgiFLtTo3Lgx1VIPkLLZ60ynT5+wZs0a7
Nq1C7169YKHH4cEWiY+MTEVxVutLVmyBK6urli9enWfUi/Sovwe0Ds705HHRM03izWN3b9//+8uyytfi7smRFGu7X
tYHW66vk2a5uDggCNHjoikRF59c/r0aTg70yM9PV3g+RYtWsdB2xvDhg2TUMtqpmYQrarj0njPKG3S0tL4teJbt24
NBQUFjBgxQiSxjI2Ncef0HWhpaaF///6Y0XmmjI2NRZYctbLvw59+wqsXqP9Gp0+fTpsbGygoaGBad0m8QcQ50pK
sHPnTmzfVh2HDx+mFu/ChQvYvn07unfvDmdnZ9jY2iLUGfrch/Dzs6uxr90Pz8/+Pj4YNiWYjdujUchBxgb2/Pf
3MyP65smcnHjx/5NzMPKSnw9PREQUEBhg0bXk+2UNfl5+fD09MTGzduhIaGBoKcgmBpaSnpZtWYsIR2ZdsC5s+fD2
dn22rxVq9eDV9fXxw4cAC2traYOHGi2EcZRU3cHTZpv1m8evWqW0PV5aoDzFe7d+9G+/btoampifDwcISHh1d6Hq1
VJuK2bds2gcfi2IIQEREBa2trDB8+HPPnz4e+vj6Ar0uRN23aBGtra1y9epX6/lhxqA9bDmuj48ePU//+/3Ygn8vL
iqxsVkreBNq0aQNTU10YmJigf//+NSpd/D3i/h4EgNGjR2PevHmY0XmMlixZgg4d0vC3Uebk5GDevHmwtramFi8hI
QE3b94Ej8fDggULMG/ePiWaNQr0zs5UB9XLqxdJ05KSkndQ1Cm8ePECHA4HmpqasLKyEmniJ5SUFpB4PPj5+eHly5
fo378/nJ2dMXr0aJHwsxMHczfrefjwIYYNG4aULBRoa2vjyJEjGDx4MHJzc8HlcpGbm4vjx4/DyspKJPHFoasKBpV
27c0qVasgLy+PlatXw870rk53YL5VPpngtZgcDqZ0nYotW7ZQzzwbHh40Ho+HwMBAAglpIS4uTmr2cIubsM5EebSX
t1UXSwD2feU7UMKwJexVY29vX63PaEmsZqCh0t/pHA6Hau4GS0tLqKmpYc+ePZUenzp1KLJSUNu3DlqMRl6h0XcK
Z0QkABWlue7fXfFa6VDeifP38eISEhGDBgAJV44qygkZubi+vXr+Pq1asICwtDdHQ0dHR0YgXsDBMTExgbG0t0Gy
vN0pKRkZhw9/cXqItta2UL3r171/jawuTL5eHo0aPw8fHBjRs3oKwLBScNJ0yaNAlt27aLgkvq09zr16/H8uXLUvP
ail9++QWEEH48AEyMjJYt24dFixYIPI2XLlyBT4+Pjhx4gQaNGGAW1tb7Ny5U+RxRUXc5XosLCwgKysLV1dXHDx4
EGf0nIG5uTk/o/XmTNx7949REZGUoknbgEBAfjnn3+QlZWfJUUWYNq0aVumb6qLhHXWVFRUoK2tLfJmvtN2ZTh06
BB8fHxw794990zZE9bw1tUuD8HUfjXtcAurFV/e8uXLf+r65UkiWaIk0LAM8y0aNm2Ka9eu4bfffqv0eGxSLiYnJZ
GRkSHmljHVUTa4XlnXoux52pV6hH2uqaiOQE9PD/PmzU0vXr2oxZNkadzs7GzcuHGDv587JiYG2traePT0eFvY1SG

Oge6PHz/iwIEDVeY7ouHZs2fg8XjYtWsXcnJyqCZJBaS8wx0WfoaBAwdi2bJlmd17Nj9Z0qdPn7BlyxasW7e0n3Fb
HAIDAzFlyhRkZmbW6bJg4v6wadGiBUJDQ9G5c2fk50RARUUFUVFR/LqKCQkJ6N27d50tpcHlcqGgoABbW9sqtzTQr
gkozTp06IA7d+5Uup/y4c0H8Pb2xuHDh6kmamMkq6Yj7VULZeFw0Hjy5AkKCgqofXZXlcTn22SJ4vyuePXqFVauXA
kejye2mEztdfV2bXz69AkWFhb85/bv348VK1YgNzcXVLZW2L5909UyXQoKCKhIS0BvJSvv5cuX0NfXp57EUByqWuL
VhsPhUC0FKG7VrZUs70/LVK20tBR37txBWFgYwsLcC0PGDarfSz9KVB1uQgguxRwIb29vndp1CioqKvjw4QPVGN/K
zc3F0aNHwePxEBERAVldXTx+/JhqDKnucI8bNw5NmjQRujRpyPyQpyM70hr+/v8ja80LFC/j4+MDPzw+vX7+Gqakpn
JycYGNjI7KY0uZ7tWPfvXuHtm3b1tLBDBMTk2p9Cd0uCSgJ4treUf41U5mioiLqS9ilWW2/WRTVF390dDTC3NwQGH
oKR0dH7N69m+r1v1VZskRRlQcrLyYmhnRjHqbuGjx4MEXNTEhQ6grg62Blt27dYG9vD319fWzcuBFTp07FypUrqcX
s0qUL5syZAwchH0qP83g8bNmy5btLL2ujU6d0CT0WERGB7du3gxCC/Px8MbZK/KKjo9G1a1dJN0MkMjIycPDgQXh7
eyM60rrGlystLcXdu3f5S8pv3ryJ3NxcqKqqtTULP8jqQEM2t+7L168AI/Hg6+vL968eYPx48dj8uTJMDU1FUKC3
GvXrsHHxwfHjx8HAIwZMwZ0Tk6i2XZIpJiGhga5fv2600PXrl0jGhoa10Pm5+eT/fv3E1NTUyIjI0Pat29Pl9fTp
KTK6nHkoR3795VebyoqIjcvn2bwjw0h0Pev3/Pf6ykpESeP3/0f5yWlka4XC61eIxorFu3jsjKyhIul0tat25NwRV
qRbhclpGTkyMbN26GovD4Xz3dcr8mJmTw9WbRoEVFQUCDy8vIiif3hwwdy584dcvfuXZKenI6SGOU9f/6cTJgw
gcjKypKxY8eSxMREkCKXy8sja9euJY0bNyZdunQhZ8+eFVmsqkRHR7PPUoavdevW5M6d0/zHS5YsIUZGRvzHAQEBr
F9fn2pMT09P0qxZs0rfA2f0nCHNmzcnp6eVGNK0uPHj4mVLRWRkZEhkyZNIi9fvpR0k0QimZ0T7NixgxgaGorkMy
YnJ4csW7aMd0rUiTRq1IgoKSmR3377jxatYrk5uZSj1fepUuXiI2NDZGXlyft2rUjs2bNonJdZWlWuVyiaqqKpk
wYQLZt28feFR0KZvr06CkpESePXtWo2sUFB5Qw4cPkwEDBhB5eXkyCuRICuzYMSIRK0vi4uIotfT/paSkklVr15K0
HTsSDodDevfuTfbt20eys70px/qWVHe4FR0USEpKitDjKSkp1G8Q//rrL9K4cWPSsGFDmnsWHLhwgVSWlpKNYakc
blcgc6Mnp6ewJcE7Q4wh8MhlpawZ0TIkwTkyJFEVlaWmJub8x9bWlqym8RaLjQ0LHC5XLJixQry6dMn/vMfP34ky5
YtIzIyMiQ8PJxaPA6H08LCwkhMTEyVP0zNiPpm8dGjR6Rfv36Ey+UK/JiampKEhASqscp8+PCB/P3336RBgwZkwIA
BJCoqSiRxCcGkuLiY7Nq1i7Ru3ZpoaGiQ/fv3S/T7gnW4mW81bNiQvHr1iv/YyMiIrFmzhv840TmZKCKpUY1ZULJC
rK2tCYfDIXp6evzveVldXcllscmoUaNISUKJ1ZiS80bNG+Ls7Ezk50TI0KFDyc0HDyXDJG4cuUKmTBhAlFQUCB6e
npk6dKL5P79+1RjFByWku7du50GDRsSKysr4ubmRlxdXcnw4cNJgwYNS0/evcmXL1+oxiSEKJcvX5KVK1cSdXV10r
x5c8Llcsnx48epxti9ezd58uQJ1WvSpKysXOM0d/PmzUm/fv3Inj17B04PRdXhlpGRIB/88guZP38+iY+Pr/ScoqI
i6nGluiXyQUFBLCmn50TKqG+Kj4yMxKpVqzBx4kQ0a9aM6rVrC1JuF8Lr168rLCMtF05NVKfe8KRJK6jFEZdHR8dK
n2/cuDF0dXVhZ2cn8qRiorZ792440ztXWHRyRfKzrF69GmlpadilaxfVfAp//vmnWB031Cdv377FihUr40fnh0GDB
iE60pp62ZW0tDR+BLZPT0/o6emBEIL4+Hjs27cP/fr1w6NHj6rcNvAjcnNz8b//Q+enp7o2LEjgo0DYW5uTuXala
kPyRKZuq1Vq1ZITk6Gmpoavnz5gvv37wvkcMn0zqa+LYfL5eLYsWM4evQo/P39kZCQAADQ09PDypUr6/x2vKysLKx
btw7bt29H165dceXKFakpa1rm9evX8PX1BY/HQ25uLsa0HYui0iIEBgb119/pR5v165deP36NWJiYqCrqytWLCeh
ASYmJti9ezdmzpxJJV5AQAC8vLxw8+ZnwFpaYuvWrbCwsECjRo34ZexomTp1KtXr0UbjXr+kpAQcDgccDkcky8bLC
wgIwPDhw/mJn78VH8PLy8vHDP0C0/evaMaV6r3cH05XKxdu1ZoZyU70xvLly+X6E03z2T64iLte6rFbeTikZU+n5
mZibi40MjJyeH6et16jY5nqamJg4c0IA//vij0uPxR1/HpEmTKJycTJueL8tFVFTUd8tLmQTP6b8zaKHk4fIbhZ
dXV1x+fJl3L5s0Ipxfz8fPzxxx8wNzfH+vXrqcRr3bo1sr0zMXPMtnJa2grdr965c2cq8SSRLHHUqFFVHs/MzER4
eDj77GYaFl3Zf/jwITw8PHDy5En4+fnh7du3/IGhQ4c0YcuWLBhz5w61mPv378e4ce0oJmKrLTZs2AAPDw+0bt0a6
9atw4gRIyTdJ0osLS1x48YND06FBMmTMDgWYmHImD0Tk5xMTEiKTDbwxsjLFjx2LGjBmVht++fTu0Hz9e7dKW3y
MrK4tFixZh8eLFUFZw5j8vyn+jpKSnP4PD4VSagBYAbty4gd9//71G79eCggIEBgbC29sbkZGRSLCwgJ2dHcaNG4f
o6GiR/z5zcnJw5MgReHt7486d0+jduzdGjx6NuXpNu00j1R1uDQ2NatXIPHWt/zPqYu1Y1uEwn/z8fEyaNAKcDgcB
AQGSbs5PU1RURGJiItqla1fp8devX0NBw5taspjQJE1jfoy4bxa7desGNzc3jB07ttLjR44cwYYNG6iVH+Ryufz/L
l/WRhSrIqqTLBH4Wm2DFmGJqMqrq3WjGbo+fPiAUaNG4ebNm1BSUoKfn5/AAPGff/6J3r17w93dnVpMGRKZpKamSu
Vnd9kg28CBA6ucyQsKChjJq+iS1ZXFrFmzMG3aNGhra/0fF2VntGXLLrh69So6depU6fFHjx7B1NSUWpbrKV0mICA
gAJ06dcLEiRMxbtw4NG3aVGo63JmZmVi6dCm0Hj3KL7/XtGLT2NjYY03atWjSpInIYj979oyfaPrNmzewtbWfVb09
BgwYQH32+8aNG/Dy8kJgYCA0NTURHx+P8PBw0SRMG5R3u0uCutjhlpGRQWJiIlq2bAlCCNTU1HDjxg1oaGgA+Nrh1
tPTYx1uSu7evYtRo0bhlAtXkm7KT/teB5j2IA3rcNMn7pvFJk2a407du+jYsW0lx58+fYoePXPqKwfIytkwT0Wysr
KgpKRU4X3/6dMnKCKpUd0KIc2f3fb29tUaZKvLA163bt0Cj8dDQEA9PT0+B3Stm3biqwkKicnh5SUFLRu3brS46m
pqVBXV6e6hTQ/Px8BAQHg8Xi4ffs2Bg0ahLnnz4pke5U4ffr0CX369MGBn28wYcIE60vrgxCcx48f4/Dhw1BTU0NE
RAS/zLKoLjAWiIQkBN7e3gg0DoaysjLS090pXHvDhcg3g8XjIycmBra0t70zs0KVL5EPmLA0t4TVx053+fJAZTM/5
R+zDjcdz58/R9euXfH582dJN+wniXt7h6mpKu60CF0JDY1NRXU17u7477//qMSrD8R9s+i9ma53795BVVVVRGXIXf
n0pqxe/JYtW8Q5j2FqA6JX3fv3n130xBTu+XL5eHIkSPg8XIIiopCSUKJPD094ejoKLAMmYzGRmkpaUJfc2IetX
l06dP4eXlhQMHDiAnJwdDhgyBtbXld7fw1EzZ5szBLSXcPnyZbRq1UrgWFpaGsZnzfHnn39i8+bNymvThw8fc0DA
AcybN4/K9WRlZeHq6orVq1cLDCKyDncN7N+v1rnSTLhVl3scFd3H4yxsbGIW1I/HDx4EJs2bckDBw8k3ZSfJontH
fHx8QgLC40cnBzGjh2LJk2aID09He7u7ti9ezd/CRFT0327kqYy4lpJk5WVhU0HDsHLYwsxMTEijff582f4+/vD29
sbd+/eRef0nanUcmWYuoLL5cLCWuK7e0LR8rLrypSWluS2bPw9vbGyZmJd0cqp48eQJvb28c0HAAMZmZMDMzw+n
Tp6ldn8vLwsDAoNIkWABQXFyMuLg4ap/deXl5WlhwIU6ePImioiIMHDGQ27ZtQ7NmzfH/w/Pnz60wsJBKPHHS0NDA
nj17MGjQoEqPX7hwAS4uLnjx4oV4G0bRunXr40vri4KCATja2mLixIkwMDBgHe6aqGrJA4fDQW5uLoqLiLnSNEaiY
mNjK30+KysLd+7cwbp167B27Vq4uLiIuWV115kzZzB69GgUFRUBADp06IB9+/Zh7NixMDAwPz58ZF06FAJt1J6i0
JmsfxKmvJEvZImNDQUPB4PQUFBUFdXx+jRozF69GgYghpSjxUeHg5vb28EBgaioKAACxcuhL0zs9DL9Awjrbhclsa
0HQsFBYUqz6vLy66/LZSUBB6PBz8/P2RkZGDQoEFS1+EuU1JSguDgYPB4PKod7m8z51dlxYoVVOItXLgQ03fuxIQJ
EyAvLw9/f3+YmJjg2LFj/HPev39fJ7dFNGzYEM+ePasy307Hjh1RUFBALWZ1+z/Pnz+nFhP4+r3L4/EQGBgILS0tx
MXFsT3ctKWmpmLVqLXg8XgYMGAAly4ILG21MUZ7u+5f/8+li9fjjNnzki6KXVCwceisrdiy5YtsWDBAixcuFACLa
PH0tIS/v7+anY4MQDA3d0dM2bm4C/5/vjxI/r160dtxrlPnz7o2bMn3N3dsXfvXixYsAda2trYt28f1dJj9Z0obxY
lsZKmsnI2u3fvFsmo2pqKnX8fPixbG1tMX78ePTp00cqEu8wzM+Q5j3cZcr2/5ZLZS4pKcHmzVh60hY50uA1gda
Wlpwd3fnl6iLioqKZERCgoKxFLSPURVVVx90jRKivK2NjY4M2N9Ri9rclqKurY/z48VW+72fPnk0t5reys7Nx6
NAh+Pj44N69e+jZsyasra2pLWEvU6863NN2fDw8MDWRvVrQqVMnrF+/HqamphJtE42U+pJw6dILX4EXJycnB2dk
aHDh2QkJAANzc3BAACHw8zMTKIDGXWJsGRNjRs3Fmk2SHEqfxNVfmuH7T1WTZo0QVRUFHR0dFBCXAx5eXkEBwfdWsK
CyvXrM2m9WRR30Rt5eXmMGTMGdnZ2MDMz42dJL5ZMtwzzM6Q5S3LUVBS8vLxw90hR60jowM70DjY2NmjXrp3Uv0cd
HR2/ew6Hw4G3t7dI4sfGxiIXMREcDgfa2trUyjh+q0GDBkh0Toaqqir/OQUFBSQmJkJNTY16PHFYcnLC06dPcenSp
QrJEAsLCzFo0CBoaWLR/fsFBATAx8chV69ehYWFBRwdHWFpaSLQOURcynKnHD58G0/fv6d67XrR4f7y5Qv+++8/rF

3TaEmuJyuVV2ygghbJn+Dxo3bhyaNgmCPXv2VHp8ypQpyM70hr+/v0jiX7p0CTweDydPnoSamhqsra1hbW2Nbt26U
bm+jIwM0tLS+Hu4VVRUEBMTw5+Bpj3DPWDAAPTq1Qvr16/H9evXYWJigtevX/P3jF+6dAnTpk3D06dPqcRjmlPImm
a4v5cv6M2bN/jf//5X57+XTpw4gSlTpuDTp08Czzdt2hR79uzB6NGjqcYrqxFdGQ6Hw77vf4CKigpiY20F9L+Sk5P
RuXNnqqVVnz59ii5duqBXr16YPXt2hWxsD+/elegydkLS3h7e/0/m38W63B/g8YHu4aGrR XKgj1//vynY0ja80HD
0aLTJ6GjYK6urkhISMCPu6fE3DLpkZycDCcnJ4SHh+PDhw9sD/wP4nK5CAwM/07v7UfRmDZnmpqa0HDggEdm7G9dv
34dkyZNQnJyskjkbZGRgYMHd4LH4yE2NpbaTRSxY0Xjxo35n9+ZmZLQUVHh38wRQvD582dq8cLcwmBpaYm2bdsiNT
UVtra28Pb25h+fPn06cnNz4efnRyUew9RF0tThrm5pKLF/hopDXL4eQkJCBMq6mZubQ1FRkXqsly9fVus8dXV16rG
lzfe249EeeAYkt4w9KysLly5dEljCpNdGQJGtfgTTZpTVh3JE9+/fxz///CP0+0jRozFq1Cgxtkg6FBYWIjAwEDwe
D7du3cKQIUNw9uxZ1tn+SUZGRmwPN0Xv3r2rctW0pqYmf0mfKDVt2hQzZ87EzJkzcf+/ff7z06dPx+rVq396C4+oE
2iWZ2pqiinv37uHSpUto3bo1xowZ13C8a9eu6Nmzp1jbxDCSFhsbK/CYEIKEhIQK2yvvq4vJgaehIV5eioiJGjhwpl
i//PILFixYgJMnT6KogAgDBw7Etm3bpHI7pzh8uzy/vPT0d0rxJLGM/eDBg/j777/+x+fNngecbN26M3bt387ev0cR
muL9BM2maMB8/fsSBAweo1iAUN3l5eTx79gyqqqqVHn/z5g06duxIteyDNIuKioKPjw+0HDkCTU1N2NvbW870jnw0
a4AlTaNEiPfP0Icn98Mw4hW2Xagym5N2fLg2u/27dv490kTLCws+M/t378fK1asQG5uLqysrLB9+3Y0bNiQWsyFC
xdi586dmDBhAuTl5eHv7w8TExMc03aMwoz6QhLvP3EvY79//z569eqFCRMmY07cuQJL2Lds2YIjR47gZp076NKLc5
V4ZdgM9zdENfZACMHFixfh7e2NU6d0QUVFPu53uL98+YIGDRoIPS4rK8tKMv2A3r17o3379pg1axa6d+804GspLPL
YnvjqUldXh4yMjKSbIXW8vLygpkRU6TGae7p+hig+vwsKcND06Fhk5ubCzMwM2tra1K49ffp0bNiwgf/7PHDgAEa0
HML/nJmZifHjx+PcuXPYUyJjMbSfNs8CwLpbw9/fnVxxx3fHjBkz0KRJEwBfJ2T69euH+Ph4CbayZlauXAKTExN+h
/vhw4dwcNKCvb099PX1sXhJrRt2xYrV66kFjMoKAje3t6wsbEBANjZ2cHIyAgLJSXsPuAHSeL9L50TU+VWA0VFR
Tl5VGLt337dlhZWCHX11fg+W7dumH//v3Iy8vD1q1bwePxqMUEpHyGu00HDrhZ5w6a29erfNv3LiB33//ndrI24s
XL8Dj8eDr64s3b95gwoQJmDRpEkxNTEv0hwCXy8WUKV0EvkHy8vKwb98+NgJdTVUL/CjDRvQZSat0fgpAcjfmNd3r
uXDhQnz58gVbt24F8HVgsVevXoiLi40ioiKKi4tx6dIL90nTh0p7ZWRkkJqayl8xUH6GXtIrBhhGEVlZ86V2eXB9e
M+3adMGwCHB6NGjB4CvWcvDw8P5kwjHj3DihUrqA4qNGjQAMnJyQKrLhUUFJCYmAg1NTVqcRjR4HK5CA0NFbqqMz
09HWZmZtTeFzo60ti5cycGDhxY6fHLly9j+vTpSExMpBKvjFTPcL948eKH/kDCkgH9iMLCQgQFBCHLywsRERGwsLC
Ap6cnbG1t4ebmRr12rCT0798fT548+e45TPWUlpZKugLSZ8CAAd89h8PhVJqkg6mct0enOH/+PNatW8d/f0jQIbx8
+RJJSUlo3749HB0dsXbtWmr1Y8uPdUvx2DfDVNvy5cvh6+srsDy4rPJJXVcf3vMZGRlo1aoV/3F4eDgGDx7Mf/z77
78jJSWFasySkpIKqy5LZWVRXFxMNU59UD6HgJc0cyj8+eef313GTsvbt2+ho6Mj9Li0jg7evHLDLV4Zqe5wS4Kqqi
p+/fVX2NnZ4fjx4/xatba2thJuGT1Xr16VdBMypkpV7b35/Pkz/P39UVhYKMYWMBxdq1evBAZEL168CGtra35m29m
zZ8PS0LJSzW0YeoEtD67bWrvqheTkZKipqeHLly+4f/8+VqlaxT+enZ0N0Tk5qjEJIbC3txdYnVpQUAAXFxc0atSI
/1xQUBDVuNkKoa9eu3z2H9opLca+Ky8vLg7y8vNDjDRs2REFBAfw4Ut/hrirbXhmaIzULJSXgcDjgCdsy4H5Ice0H
Y0/vz8SEXPB4XCgra2N8ePHw9raWtJNq3M2b95c4bni4mLs2LED7u7uUFVvxZo1ayTQsrqtuLgYmzdvrVr10nv2b0
o3UuLE5XIFRtjYI0xbNksy/uMmTZogIyNDEK1jmHojJSUF/fr14z/u2bMnZGVl8f8t2zq/PLjs3rD8c9Kj80DBCHN
zg4EH806ePALFRUJv2dsky0tLSoxpw8eXKF5+zs7JGqC/u3bsn9oS9kijXfHISws+LUF5mZqZiYkpZj7s6yxRo
jtSkpqYiMDAQ3t7emD17NiwsLGBnZydvH6qrV6+u1nnLly8XcUukQ2lPKWxtbXHS2DH060jwMybGxcVh3LhXGDNmD
Pz9/aXqNSRuhw4dwwLly5Gfn4+VK1diypQpKJWv+o8/qvLz82FmZoZbt25h4MCB6N+/P79kj6urK06fPo2LFy9W0X
IsSnZ2djWqn6mnp4fg4GDMmzcPcXFxePXqFUxNTfnHX758KbBUkobly5fzc2F8+fIF7u7u/JsAmkliGKau0blweV
nYsvPwkrDqqu1a9di1KhRMDY2hpKSEvz8/AT+njweD+bm5lRjirukozTr3r07DA0N4ezsjPHjxwvtlNL06tWrap3X
vn17ajErG6T5lijut6U6aRqXy0VUVBRatmxZ5XmiG1159uwZfHx840fnhzdv3sDW1hb29vYMGABnZ79NjQ0FHqMw
+HgyZmNKCgoqN0JP8TJ09MT7u7u8PPzw9ChQwW0nT59Gg40DLi2bFmdzmwvKRcuXICbmXuSk50xYMECZjs3T2CJGV
N9y5cvh5+fH4KDgyusCoqJichW4cPh40BALfusuPeSBQYgwtbWfV369UNcXBx+//13BAch84+7uroi0TkZAQEBVOK
ZmJhU60s9LCyMSjyGqQu4XC4sLCwELgcHBwdjwIABdX55sL29fbXe89LQgcZKyoKSkLKFe91Pnz5BSUmpyko3j0Tc
unULPB4PAQEBKCoqwgqRo+Dk5CQw+ExbWSmy8r7du83hc0r8oJvUd7hrQy3e0tJShISEwNvbG8HBwVBWVhZJ8XhJi
460hpubG0JDQ+Ho6Ijdu3dLukl1Quf0nTFnzhw40jpWetzb2xtbtmzBw4cPxdyyuisqKgqurq6IjIyEi4sLli5dKh
VZbiVJR0ch69evx+jRoys9fuzYMSxdupRaZs/y9UDLvnjLvoRFsULp8uXL0Hv2LFq3bo2ZM2cKVGJYtWoVjI2NYWJ
iQi0ewzCCHBwcqnWeNHRK66vjx4+zrXK1XH5+PgICAuDJ44Pr169DQ0MDjo60mDx5Mtq1a0c1VxMTKXPE0Jw5MgR
bNu2DUpKSnj//j3VuOLG0txi9uHDBxw4cADz5s0DAPj7+2P480F1etYt0TkZy5Ytw9GjRzFq1CisXbuWarlaaaego
IAnT54IXS7z8uVL60npIT8/X8wtq7u4XC4UFBQwdepUaGhoCD1vl1qxZ4mtUHSvL4+kpCSh+yhTULKgralNLdnIy5
cv+f9NICGBQH0NTtXYUWSJPLZ/MQzD/CgrKys40vD0tKjYwUa66ri4mI8efIEcnJ4506heXLlyMhIUEqls/
XF2Wrdfv34/U1FSYmZnh3LZIo15+fJLum5ITExEfPmzC0CBQugpKRE5drXrl2r1nm0qy1J9SZGY2PjKpetpKam
wt3dHf/995/Y2tSyZUt+ZxsApk6dil69ev107VhJsk9Px6pVq7B371788ccfiIiIw0+//y7pZtU5CgoKyMzMFNrh/
vz5MxQUFMTcqrqtfv24HA40HHihNBz0Bw063D/ABUVfbx//15ohzstLa1Ge6jLK9+R5nA4aNeuncg62MK+hBs3bo
y0HTtSHxT99nugKp6enLTjMgwjGfn5+bCyssIvv/wCe3t70Dg4SN3KRHx8PIY0HcofMB0xYgR27dqFswPHiIYmBs7
0zjhZ5oyEW8n8CC0tLbi5uUFNTQ1LlIXBSEiYlGLdu3cPbm5uuH790pydnXHu3Dnqk6ZVRVIT5RJ2qe5wh4WfIT4+
Hoc0HYKcnBzGjh2LJk2aID09He7u7ti9ezc0NTUL2sa6uMAGNzcX//vf/+Dp6Ym0HTsi0DiYehKM+qRPnz7YtWsXd
u3aVenxHTt2oE+fPmJuVd0m7TWjJcHU1BTr1q1DYGBgpcf//fff0r3cuqq2y8jIYNq0adi0aR01T0wPHjz47jksUS
LDSI+QkBC8fv2an9vHw8MDRKZGCHZ2xpgxY6RiYN3NzQ2amprYtm0bDh06hKNHj+LRO0ews7PDmTNnoKysLOkmMj8
gPDwcPB4PgYGBkJGRwdixY+Hk5E09zt0nT7F06VIEBgZi7NixiI+PF9LEpLBqI3L5edi6dSu2bdsmmthEigUHB5MG
DRoQDodD0Bw00dLSIqGhoaRfixbExMSEBAchS7qJRElJiTx79kzSzfghrVq1IoqKisTV1ZVER0eTmJiYsn+Y6rl58
yaRk5MjY8aMIbdv3yZZWVkkMz0T3Lp1lihbWxM50Tly48YNSTezTrGwsCCZmZn8x2vXriUZGRn8x+np6URfX18CLa
u74uLiIJKSEunVqxc5evQo/33u7+9PevbsSZSULMijR49EFL/Un5WZmZmV/rx48YIEBAQqDxV14u7uLrL4DMPUL6G
hocT0zo40atSIqKiokCLTppDIyEHJN6tGwrVqRe7du0cIISQjI4Nw0Byyd+9eCbeK+RGvXr0iqlevJh06dCacDocY
GRKRHO9HcnJyRBjv2rRppEGDBmTQoEHkwYMHioLRlZKSErJv3z7Srl07059e8Lj8UhJSQn10FK9h7tPnz7o2bMn3
N3dsXfvXixYsAda2trYt28f9bX5P0tZWRKsMTf1akn5t3uPvk1q901j2smMpN2JEycwZcoUfPr0SE5pk2Bys+ePU
ITVTGVK5+/QUVfBdHR0fz32bt379C2bVv2Gv1BkZGRChJywuPhjwSm0np6cHLywt9+/YVWwXlZXWExsZKbFXSgV0
nsGTJESfXykt5p07d9g2HYaRctnZ2Th8+DCWLFmCrKys0p2NmvcLijU1lV9CUULJCffv3xfYy83UXmZkZggLC0PL
li0xadIk0Do6QldXV6QxuVwu50XloaenV+V59+/fpx47KCgIS5YswYcPH7B48WLMnDlToEICTVK9pPzX48fw8/ODk
pISZs2ahUWLfMHLli21prNdVyUnJ0u6CVJn5MiRGDRoEEJCQpCUlATga1Zoc3NzgUzJzM+R4nFFserduzfi4uLw4M
EDgddp165dqccyNDQUWFKdn5+PYc0GVcjLIYov4cp06dJFIJEbLTk50ZCRkRFYThodHY1ly5bh3LlzbFCIYaTy8+f

P4evrC19fX2RLZWHgWIGSblKNcDgcgUkZLpdLbRs0I3oKCGoIDAZe0KFDxVa+eMwKFWKJ863w8HC4urri4c0HmD17
NlxdXUVeclyq09yfP39GkyZNAACysrJQUFBgo2wUVCdpUXR0NMseXE2hoaH4+++ERkZiZEjRwocy8rKQqd0nbB79
27069dPQI1kGEGGhoZQUIMDh8NB8+bNRRLDyspK4PGIESNEEqe63r59SzV5y+vXrzFu3DhErkZCRkYgf//9N9auXQ
sXFxf4+/tjXigRUHhJBrV4DMPUDvn5+Th27Bh8fHxw7do1tG/fHs70znBwcBCaLLkUIIRAR0eHP1iak5MDQ0PDCln
Zy6/mY2qH06dPiz2muDvcLpaWuHLlChwcHHDy5Em0bt1aLHGLusMNFm2YmJaWBUrB8GTJ0+Qm5srcE7nzn0L0TQA
Xzuv0jL6l5WVhU0HDsHLYwsxMTFsZqaatzgr/++qvSDM+NGzfG1KLT4enpyTrcP4DD4VRIOMUSUNVcZmYmli5di
qNHj/ITjzRt2hQ2NjZYU3Ytf4CTBgCHB7Rr165WLM95//49/vnnHwwYMIaNd3c3JCTk40tW7ciMDAQW7duRXh40L
p06YLExESJJ/RkGIauiIgI+Pj4ICAgAF+++fIGVLRVCQkLq/Kz2t1h9dIamjIwMHDx4EN7e3oi0jqZyzQsXLKBWVhZ
Hjx5FQECA0PNOdwpJ9R5uLpDbYY9xeaLaa5yfn49Lly4hMTERHA4H2traMDMzk4osLOWFhoaCx+MhKCgIGurqGD16
NEaPHg1DQ0NjN610UFDx4ULF6Cvr1/p8YSEBjibm+PVq1dibLndxeVYWFhwd+LExwcjAEDBvBL0xUWfuLChQtsU
OgHfPr0CX369MGBn28wYcIE60vrgxCCx48f4/Dhw1BTU0NERASaNM1KJZ6MjAxSU10plwQRpvwS9jJZWVl4/fo19P
X1cfHiRwrtUVVRUBAAIymJJCWloa2bdti3bp1cHNzo3J9hmFqFy6Xiy5dusDJyQkTJkyo9LPyw4cPaNmypQRaxzC
1x+XLl+Ht7Y2TJ0+iRysWGDVqFLZu3UrL2n5+ftU6b/LkyVTilZHqGe7q7DUWlh6+Jk6fPg1nZ2ekp6cLPN+iRQt4
e3tj2LBh1G0K2+vXr+Hr6wsej4fc3FyMHTSWRUVFCAwMxK+//irp5tUp7969q3KVg6ysLD58+CDGFtV95T8o7ezsK
pwzadIkCtVHKqxeVROngJTAS2fP+Alxvj1mbm601atXY/PmzVTiiXssuPwS9jIqKirQ090Dubk51T1taWlp0NLSAg
C0bt0aCgoKEl82zzCM6Ny9exfdwnWr8DwhB0fPn4eXlxf0nj2LwsJCCbS0jqioKHTv3p3/WVmWRLdMYWEhTp06hbF
jx0qqiUwt9erVK/j4+MDHxwc50TnIyMhAQEA9aTB1eLIiYRxIfW853VAZmYm2bFjB+nWrRvhcrlUr11W4mn06NEK
IiKCZGRkkIyMDHLz5k0yatQ0oqBBAXIREUE1prhZWfGqQZWVlYmtrS86c0U0Ki4sJIYTIysqSuLg4Cbeu7unQoQMJC
goSejwwMJBoamqKsUUMU5G6ujq5c0GC00Pnz58n6urq10Jx0Bzy7t07aterbbhcLnn//j3/sZKSEnn+/LKEW8QwjD
g9e/aMLF26lLRR1440adKETJgwocp7gbqAy+UKfG4rKysLLHNMS0ujft/N1G1Hjx4lZmZmRFFRkVhbW50TJ0+SwsJ
CifQp4uLiyLx588gVV/xC/dpSPcNdXmVLN728vKjGWLt2LRwcHLBnzx6B5/v27Yu+fftie6tSpWLNmDc6d00clrjhd
vHgRs2bNwrRp06CtR5p5tR5lpaWwL580SwsLCAvLy9wLD8/HytWrMDQoUML1DqG+So1NRWd0nUSetzAwICfL4MWL
y8vKCKpVXn0rFmzqMYsvx1IR0cHAWcOpL4diBCCP//8E7Kysvy4ksZCzjCM6BUUFOD48ePw8vJCZGQkzMzMKJqaiu
joaBgYGEi6eTVGyqIMKv9Y2HNM/TV+/HgsWrQIGYGBUFZWfVn8nJwcHDlyBN7e3rhZ5w569+4tkqldUt/hFvF551u
3bsHDw0P08RkzZsDY2Jh6XHG6fv06eDweevToAT09PUyc0BHjxo2TdlPqrH/++QdBQUHQ0dHB33//DV1dXXA4HDx+
/Bg7duxASUkJli5dKuLmMvVcixYt80LFC7Rr167S48nJydQzlu/evbvKZdwcDodqh1uc24HKZ2Zly8kZRRpNnz4dR
44cga6uLuzs7BAYGIjnzZtDtK6uViSHFBewWJT5lq0jI3bu3Inw8HB+f4JWLpiq3LhxAl5eXggMDISmpibi4+MRHh
40IymJ0QSkPmdei0hi6b08vDx58eKF00MvXrwcGgoKIoktbrm5ucTb25sYGRkR0Tk5wuVyyZYtW8jnz58l3bQ658W
LF8TCwoJwuVzC4XAIh8MhXC6XWfHyk0TkZEK3j2GI06Mj6d+/PyksLKxwrKCggBgbGxNHR0dq8cS9pLw+bAdiGEZY
ZGRkyJiLsYrcI0nTdrzyn9tKSksSTnzXXl5ecTX15f079+fNGzYkAwfPpzIyMiQhw8fUo/l4eFBdHVLiaqqKlMwY
AGJjo4mhIj+fSjVwcpLZUwRf0sJyeHmJgYKcxwd+nSBXPMzIGDg00lx3k8HrZs2YL2YfjqsSXpyZMn8Pb2xoEDB5
CzmQkMz0J1P0r6zIyMvD06VMQqCtR52WUT6qY7Xr1+jR48eaNiIwBmMAE9PT0AX0sv7ty5E4WFhbh79y610rL
fylKel5eHu3fvon//LTiWPaQk1NrcJ20DJT05FSkqKwLYdiaIUCsMwknX48GH4+Pjg1qlbGDJkCCZ0nIjBgwdD
QUFBZPek4sblchEaGopmzZoB+LqdMiAggL8yKj09HWZmZqxCCCNUULISeDwe9u/fj5ychAWZMGtW1tYYNWouLlevLy
srC1dUVqlvFlhBJ8q+IQDpnuG0iIggzs70REVFhFts2Zns376dvH//XqSjGJ6enqRZs2bk7NmzFY6d0X0GNG/enH
h6eookdm1QXFxMTpw4QYYNG8Z/LiUlHsZULeivVQzD0PD8+XMyePDgCisxBg0aRJKSkqjG+t4Md3R0NNWZkiZNmpD
Y2Fihx2NiYkiTJk2oxavMpUuXiI2NDZGXlyft2rUjs2bNEmk8hmHELzk5mSxfvpy0b9+etGjRgnC5XHLs2DFJN4uK
su+Fyn7KvjfYDDdTHSULJeT06dNkxIgrpEGDBtSu6+7uTrS1tYmamhpZtGgRfxadzXBTkJeXhyNHjoDH4yEqKgoLJ
SXw9PSEo6Mj9Q36pawLGDduHAIDA6Grq8uvrRwfH4+kpCRYWVnh2LFj9Wq/joqKCqKjo9GhQwdJN4VhmJ/0/PLzaG
pqgsPhICMjA0LJSQCAjh078mzcaFq1ahUWLLwIRUXFSo/HxMSGw7du1GZKFBQUkJCQAHV19UqPv3z5Evr6+sJly6M
Sr4y4SqEwDF07EEIEhICH0+H06dP8+sNb9u2TdJN+2kvX76s1nnCPmcZpjLv37/nr3YbMmQIvLy80KZNmXpdMzW8
HDweD4GBgdDS0kjcXjX9I3DXi16foqIiHB0dcePGDTx8+BDz58/Hv//+i19++QXDhw+nGovL5eLYsWPw9/eHrq4uE
hISkJCQAD09PRw6dAiBgYHlqrMNsIyUDCMNtLw1+fXgmzZtik2bNkFdxV0knW3ga1IxYZ1tUdDR0UFoaKjQ4leuXE
HHjh2pxQsICIC5uTn09fXx6NEjbN26FW/fvgWxy+UP1DIMI704HA4GDx6MgIAAvH37FgsWLMC1a9ck3awa+eWXX7B
hwwb07dsXv//+0XyVxoxGjRpBXVld4IdhfsS3W8uuXbuG/Pz8GL/T2NgYfn5+SE1NxbRp09C9e3cYgXujb9++8PT0
rPHly6tFPT8Aurq62LBhA16/fgl/f3/q19+/fz8KCwSxbt4nDx5EvHx8YiPj8fJkydhY2NDPR7DMIw4LB8403fuH
HJzcyXUGvrs7e2xYMGCSvdonz17FosWLRKam+NnjB8/Hj169EaBwhqOHTUGESNGVCgJxjBM/dCSWPT069dPaBWIm
L58uXw9fXfKCFDYGnj0uXLMHatGmSbhbDCKwrsAwXfxfv0bDx48QM+ePfHvv/9Sj1MvLsL0/cS/dRHysrKiIm
JYUvKGaY043K5SEtL43+2ifp9/b2ki8nJyZg3bx61JeXi3g40ZcoUBAQEOF0nTgKLUeSeuIVhGIm5d0kSLl68CDk5
0Tg706NDhw5ISEiAm5sbgo0DYWZmhgsXLki6mT9NS0sL7u7u/AmmqKgoGBkZoaCgoMoSjwxTXeLoUxQVFUF0Tg4A8
Ntvv+HcuXM1Tggr9XW4xY2NXzAMI404HE6F+qmirKdqZWUlsmtXpmw70NGjR3H48GEKJCAAPT09LBy5UrqK5T27t
2LrVu3IiAgAdwed3PmzMGgQYNACEFpaSnVwAZDSJ6fnx8CHBzQrFkzfPr0CV5eXvD09MT06dMxevRoxMTEwMDAQN
NrJGUlBT069eP/7hNZ56QLZXf27dvqVwYBhRK+tsA8CLFy9QVFRU42uyGW7KuFwu3r17h5YtW0q6KbUGS5rGMHuf
l8uFhYUFGjZsCAIDg7GgAED0KhRI4HzgoKJNG8Gvv8+X01zLNRURFJfFGXQmEYRrK6du0KGxsbuLm5ISAgADY2N
jA0NERAQAC0tLQk3TwwZGRkkJaWJnAPrkysjNjYWGhqakqWZYy0EpeqWVrxWIEbsvI3pCLU1ZvSn8GWLDNM3Vfd/c
s+Pj4ibslXJSULCA40pjYTzuVYq5yxJ4SAw+GIvH5saWkpzp49C29vb5w/fx6FhYUijccwjHh82/EsLS1Fw4YNcf
yZRgBG0u6adRUdg9c2eBsfbOHZuiqqx1utqRcBJSVlaGgoCDpZojdy5cvkZubCz09PYF9jvHx8Wjbtq0EW8YwTE2J
qyP9PQkJCeDxePDz80NGRga+fPlC5bphYWH8/yaEwNLSEl5eXlBVVaVy/ericrkyNmwyBg4ciP/++0+ssRmGEZ3c3
Fx+p5PL5UJexL7ql1Pnjy5wnN2dnYsaKjrzYsWSky6iixGa4KSufWEgaLd3ozpkzh//clCLT403tDeBrJviQkB
Cp+yJhGEYycnNzcfToUXh7eyMyMhKmpqawsGBLZUVwRoiZKY4hhFT09Px+3btyEnJ4c///wTMjIyKCoqs6d0/H
vv/+iqKgI6enpIovPMIz4cllc+Pn5oXHjxgAAW1tbbNmyBalatRI4j3a5WoapzZ4+fYqsrCx0796d/9yVK1ewdu1a
50bmwsrKCKuWLLJFY+9gMdy0lyiRctcXU3bsXZcoU/uMLFY7Aox8ch+/fvh76+Pv7++2sWrUKXl5eEmwLzB13a1bt
+DL5YwAgABoa2tjwoJUH37NRZt21bns3hHRErgyJahyMrKAoFDQY8PeDj4wMrKyuUlpZi6dKlCHR0LHQzGYahqP
wM8NSpUwUei2PbCsPUJgsXLoSBgQG/w52cnIxxh4ahX79+6Ny5M9avXw9FRUWBSb66qN7V4Ra1+rBgIDExET1690A
/PnXqFIYPH44JEyagW7duWLDuHa5cuSLBFjIMU9f9+uuvsLW1RatWrXD79m3cv38f8+fPl5pBzWXLmHqoEGiJy3F
7Nmzcef0HQwd0hT//PMPkpKS8Pfff0NRUVHSzWQYhPLS0tLv/rDONLPf3L17F5aWlvzHhw4dgo60DKJCQRb161Zs2
bIFvr6+Emvfnj17KqxC+Rmsw01ZWfHYNdx8CPy8/MFMvVGRESgf//+/Mcd0nRAWlqaJJrGMIyUePr0Kfr37w9TU1

N+TWxxE2XnPiYmBsuWLYOBgQHwrl0LDocDDw8PTJo0SWoGFRiG+X+Ojo7Izs6WdDMYpLZJT09Hu3bt+I/DwsIwbNg
w/mMTEx08ePGCWrbzt2/j/PnzAs/t378fmpqa+0WXXzBlyhSBZKXjx4+vUI3LZ7Al5ZSFh4cjPDy8wvONGzeGrq4u
zM3NBRKK1UXq6uq4d+8e1NXVkJ6ejri40Pzxxx/842lpafw9SgzDMD8j0TkZvr6+mDZtGvLz82Fra4sJEyaIrDNav
vxWQUEBXfXcRFB27N0nt/zS0YqKiLBUVIShoSGVazMMU/v4+fnh33//hbKysqSbwjC1RrNmzZCamgo1NTWUlpbi7t
27mDt3Lv/4ly9fqK4eXrlyJUxMTGBhYQEAepJwIZycnGBvbw99fXl53LgRbdu2xcqVK6nFBFiHm7oTJ05U+nxmZib
evHmDTp06ISQkpE4nVZs0aRjMzJiBuLg4hIaGQk9PTyDZQUREBAwMDCTYQoZh6jpVVVUsXboUS5cuRWhoKHg8HoyM
jFBcXAXfX1840ztDR0eHWrzyg4SizqzL4XCQnZ0NeXl5fsmxvLy8CvXARVX3m2EY8aoPWw4Z5kcZGxtjzZo12LlZJ
44d04bS0LKYmprij8fHx0NDQ4Nav0joaKxZs4b/+MiRI+jVqxzf27dsHAFBTU80KFSuod7hZlnIxSk1Nxfjx46GlpV
WnE4qVlpZixYoVOHPmDFq3bg1PT0+BJZ9jxozB4MGD4eTkJMFWMgwjbbKysnDo0CHweDzcv38fBgYGiI2NLXSzfkr
5ut9lne7yj9meToaRDLwuF+/eveOvbGEY5utqNjMzMyQnJ4PL5WLbtm2YNm0a/7iVLRU0NTWxefNmKvHk5eWRLJTE
r6T0xx9/YPDgwfjnn38AAC9evMBvv/1GffsH63CL2c2bNzFx4kQ8f/5c0k0RqTdv3oi9fi3DMPVHdHQ0eDwetm3bJ
umm/JTKth5VxtjYWMQtYRhGHLhcLho3bvzdbTgFPn0SU4sYpnYoKipCFhw8WrZsibZt2woci4mJQbt27dC8eXMqsd
TV1XHgwAH0798fX758QZMMTRACHiw//wTwNcl5sbGxtTfh2xJuZipqqri/fv3km5GjcyepRtbt24VevzNmzcwNTV
FYmKiGFvFMiW0ef/+fZvbbwwMDES+7FuUWEaYeqfVatWsRw3DP0Ny5cv448//kCXLl0qPS7s+Z81ePBguLm5wcPD
AydPnoSioiL69evHPx4bGwstLS2qMQHW4Ra7mJgYqnsRJGH//v1o3rw5li9fXuHY27dvYwPqitatW0ugZQZDSIs2b
dogNTWV3+nW19dHSEgI2rdvDwD4+PEj+vTpI1VLrgkhCASLQ35+Pvr27YumTztKukMw1BkY2NTP3P4MAxt5ubmaN
CgAXR27ALTU10Ympqib9++aNCggUjirV27FqNGjYKxsTGUlJTg6+sREIvH48Hc3Jx6XNbhpx8wpsywVLZuHPnDub
Pnw9nZ2cxt4qu06dPY/DgwWjevDlmzJjBfz41NRWmpqZo2bJlhZT7DMMwP6L8bqfXr1+juLi4ynPqkszMtMyePRv3
799H7969sWnTJlhaWiIiIgIA0LJLSly6dAmd03eWcEsZhqGBLftjmIpSULIQGhqK8PBWHDx4EGvWrIG8vDz690nD7
4D36tULsrJ0uqwtW7bE9evXkZWVBSULJcjIyAgcP3bsGJSULKjE+hbbw01Z+UQ43+Jw0Jg6dS2bNkC0Tk5MbeMrr
Nnz2L06NHw8fGBra0t0tLSYGJigqZnm+LSpUsiebEyDFN/cLlcpKwL8WeDLJWVERMTgw4d0gAA3r17h7Zt29bZGW5
nZ2dcu3YNkyZNwpkzZ8DlckEiwZyTW8DlcrFo0SiOKSkh0DhY0k1lGIAc8p9pDMNULJKSgrCwMFy9ehVXR17Fy5cv
oai0SDWJ2cuXL3Hx4kUUFxejf//+6NSpE7VrC8NmuCkLCwur9HkVFRVoa2tDSUkJ0dHR6Nq1q3gbRtmQIUPA4/Hg6
0iIwsJCEhH4QEVFBSEhIayzzTAM8x3nz5/H4c0HYWxsDACHB6ipqSE0NBS9evUCAHh4eGD480ESbiXDMLSULpZKug
kMU+upqanByMgIhYWFKCwsMePH6k0rF+7dg2WlpbIy8sDAMjKysLPzw+2trbUYLSGzXCLSVk5G29vb0RHR9fZWZn
ydu7ciZkzZ6Jbt264fPkySwbCMAwVmJyIySExMRMuWLUeIgZqaGm7cuMHPgfHu3Tvo6enV2c9SWVLZpKSkoE2bNgAA
RUVFPHz4kJ+sJS0tDaqqqnX238cwDMMw1fh8+XNcvXoVYWFhCAsLQ3Z2Nvr27Yv+/fvD2NgYv//+07WVwcbGxLBRU
cGePXugoKCAxYsX4+zZs0hJSaFyfWfYh1vEqKNDwePxEBQUBHV1dYwePRqjR4+GoaGhpJv20wwNDQWWzcFhX0NNTQ
3KysoC592/f1/cTWMYRkpIe5lqaV8yzzAMwzDfo66ujs+fP+OPP/7gd7C7d+9eYw81Lc2aNC01a9dgYGAAMjNzYw
KigrS09NFmqiULSKXgdevX8PX1xc8Hg+5ubkY03YsioqKEBgYiF9//VXSzasxKysrgccjRoyQTEMYhpFawrbnSBMv
Ly/+Fpzi4mL4+vqiRysWAEBlvxrDMAZD1EaFhYUAvua5kpGrGyYMDLhcrsjjZWZmCuRraNoSeRQVfZGZmSnSDJieb4
albM0tISN27cwNChQFySWAGQMHjYmJYkYJ0T00xMjFR0uBmGYURNWMMWHLRUVETcEtHQ0NCv0bqf50RkMbSGYRiGYS
QjISGBv6Q8PDwcBQUF+00PP2BiYsKf8abVCedyuQgNDUWzZs34z/Xt2xcBAQFo164d/znafUJYh5sywVLZzJo1C90
mTY02tjb/eWntcMfGxiIXMREcDgfa2tqshA3DMFRUVfHhW2zJNcMwDMNIj8ePH/MzLYeEhIDD4SAz5M5PKtcvULSrr
/pY9L4rtamxJ0WXXr18Hj8dDjx49oKenh4kTJ2LCuHGSbhZ1UVFRChJYQnx8PP9Fy+Fw0KLTJ3h7e+P333+XcAsZh
qnLvl1STgiBpaULvLy8oKqKsFWMQzDMAwJku/evUNsbCxiY2MREx0D70xsNGzYkNr1JbVqjM1wi0heXh60HDkCho
+HqKgoLJSUwNPTE460jhwSi9U18fHx6NwRf/T19TF37Lzo6+uDEILHjx9j8+bNePLkCSIjI6VuNp9hGMkpn1Ssrtu
2bVu1zps1a5aIW8IwDMMwkvH+/Xt+ze2wsDAKJiZCTk40PXv2hKmpKUXNTdGnTx+qne7vEUX5ZtbhFoMnT57A29sb
Bw4cQGZmJsZmZHD69GLJN+unjRkzBiULJQgMDKyw5JMqGLgJrkFOTg4BAQESaiHDMNJG2jrcmpqa3z2Hw+Hg+fPnY
mgNwzAMw4gfl8uFnJwcevToAVNTU5iYmMDIyAgKCGpibUdZ+WYvLy/ExMRQX1L00txiVFJSguDgYPB4vDrd4W7Zsi
X0nz+PHj16Vhr8zp07sLS0xIcPH8TcMoZhpJW0dbi/59Wrv1i5ciV4Pj6km8IwDMMwIhESeoI//vgDjRo1kkh8cZV
vZh1u5ofJy8sjKSkJampqlR5PSUmBtrY2CgoKxNwyhmGklbKyMmJjY6s1MywNYmJi0K1bN5YUjmEYhpFa79+/FyjT
VV5xcTHu37+Pnj17UotZWfnm3bt3izS5NUuaxvwDQ0NREVFCElW3759G+rq6mJuFcMw0mTUqFECjwsKCuD14LJhF
DwoKEiczWIYhmEYhpI2bdogNTWV3+nW19dHSEgI2rdvDwD4+PEj+vTpQ23w+dvzydu3b+eXb969ezeV6wvD0tzMDx
s3bhzmzZsHXV1dGBgYCBx7+PAHfIXYgMmTJ0uodQzDSIPGjRsLPLazs5NQSxiGYRiGEYXyC61fv36N4uLiKs+piYs
XL1ZavlnUWIEb+WGLFy/G5cuX0bVrV5iZmUfFxx/Al+zLly9fRw+ePbF48WIJt5JhmLrMx8dH0k1gGIZhGEBCyido
rgtJlW9me7iZn/Llyxds3rwZ/v7+SEXMBAD060jYXsYGc+f0Fw6foZhmLqm/JL58jIzMXeEhs72CDMMwzBSi8vLI
i0tjb+kvHyC1Hfv3qFt27bUwvFXb6ZdbgZhmEYRswcHqyqR6b6WcYhmGklYyMDBITE9GyZQcCmpoYbN25Aq0
MDwNc0t56enkghR9G0CgAAC3FJREFUn8VRvplluJmflp+fj0uXLiEXMREcDgc60joY0HCg2GvnMQzDMAzDMAxTt3C
5XIEl44SQSh+LY7VXSUKJzpw5Ax6Ph10nTLG9NtvDzfyU06dPw9nZGenp6QLPt2jRat7e3hg2bJiEwsYwDMMwDMMw
TG0XFhYm1ni0jo7fPad58+bU47IZbuaHRUREwMTEBMOHD8f8+fMfKqZt2rQJZ86cWdWrv9GnTx8Jt5RHGIZhGIZhG
0brjLq6ujoMDQ2FZj/ncDjUS46yDjJfzwywTLaGmpoY9e/ZUenzq1KLISUNBuXpNxyhmEYhmEYhmHggvJLyivD4X
AqlAr7WdOnT8eRI0fQvn170Do6ws70Ds2aNaNy7aqWdjfzw5o2bYpr167ht99+q/R4bGwsjI2NkZGRiEawMQzDMAz
DMAxTF1S1VzoiIgLBt28HIQT5+fnUYhYwFiIoKAg8Hg8REREYmQInJycYG5uTrUE2bdYh5v5YQoKCKhISIC6unql
x1++fAl9fX3k5eWJuWUMwzAMwzAMw9RVCQKJWLx4MYKDgzFhwgSsWbMG7du3F0msly9fwtfXF/v370dRURHi4+Ohp
KREPQ6X+hUzQaejo4PQ0FChx69cuYK0HTuKsUUMwzAMwzAMw9RVb9++xV9//YX0nTujLgY0dHR8PPzE1lnG/i6XJ
3D4YAQgtLSUpHFYR1u5ofZ29tjwYIFle7RPnv2LBYtWLTtGrMMwzAMwzAMw9RPWVLZchV1Rce0HREXF4crV64g0Dg
YBgYGIoLXWfGIf39/mJmZQVdXfW8fPsR//2HV69eiWR2G2BLypmfUFpainHjxiEwMBC6uroCWcoTEwMxcuRIHdt2
DFwuG89hGIZhGIZhGkaiDRs2wMPDA61bt8a6desYsQIkcb7Nmmag4MD70zsrFigrDzW4WZ+2tGjR3H48GEKJSUB+
LrU3MbGBjY2NhJuGcMwDMMwDMMwTmRmXy4WcggIGDhwIGrkZoeFRkTpf5XLRvn17GBoaVpkgjXZZMFmqV2PqLYEDB2
LcuHEAgFevXsHLYwv37t2Dqqoq+vXrJ+HWMQzDMAzDMAxTW02aNeLkmcFrQ7wybIab+WEPh72EsGHDkJKSAm1tbRw
5cgSDBw9Gbm4uufWucNzcfz4cVhZUwM6qQzDMAzDMAzDMBLDntkyP2zRokX47bffEB4eDhMTEwWd0hQWfHbIyspC
RkYgpk6din//vF5zWQYhmEYhpEoNsPN/LAWLVogNDQNTt3Rk50DLRUVBAVFYUePxoA+Fw/r3fv3sjMzJR5Q
xmGYRiGYRiGYSSiZxAP+zTp09o3bo1AEBJSQmNGjVCs2bN+MebNm2K70xsSTWPYRiGYRiGYRimVmAdbuanLE84II
kEBAzDMAzDMAzDMLUzy1L0/BR7e3s0bNgQAFBQUAAXFxc0atQIwNeC8gzDMAzDMAzDMPUD28PN/DAHb4dqnefj4yP
iljAMwzAMwzAMw9RerMPNMAzDMAzDMAzDMCLA9nAzDMMwDMMwDMMwJaiWdjfDMAzDMAzDMAzDiAdrcDMMwzAMwzAM
wzCMCLAON8MwDMMwDMMwDMOIA0twMwzDMAzDMAzDMIwIsA43wzAMw9QCaWlpmdLzJjp06ICGDRtCTU0Nw4YNw5UrV

[illegible]

```
"text/plain": [
  "<Figure size 1200x800 with 1 Axes>"
]
```

```
]
},
"metadata": {},
"output_type": "display_data"
```

```
}
],
"source": [
    "plt.figure(figsize=(12, 8))\n",
    "sns.barplot(x='Category', y='Rating', data=df3)\n",
    "plt.xticks(rotation=90)\n",
    "plt.title('Ratings Across Different Categories')\n",
    "plt.xlabel('Category')\n",
    "plt.ylabel('Rating')\n",
    "plt.show()"
]
```

```
]
},
{
  "cell_type": "markdown",
  "id": "67f15584-6475-4684-bf96-7cb4b1190207",
  "metadata": {},
  "source": [
    "##### Do paid apps have higher ratings than free apps?\n"
  ]
}
```

```
},
{
  "cell_type": "code",
  "execution_count": 109,
  "id": "87d651f7-53c6-4231-9a83-6d8b762cce90",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "image/png":
```

"iVBORw0KGgoAAAANSUhEUgAAAioAAAHFCAYAAADcytJ5AAAA0XRFWHRTb2Z0d2FyZQBNYXRwbG90bGliIHZlcnNpb24zLjguMwCwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy81sbWwAAAACXBIWXMAAA9hAAAPYQGoP6dpAAAz0ULQVR4nO3de5x05f7/8ffnZ3PMACGwwxjEiBI+RAVRghhSm2HqFH0nOpJ0m1KKFI6kG+bUoxdC03tsJX42jtSMdsYpCJl5zByyGnGmDLH6/eH39xft3uGmyb7wuv5EkZhw7rwtDb6rPu+x7xnrWut2ZGMMQIAALBQKV8XAAAAUbiCCgAAsBZBBQA AWiugAaARVEVQAAAIkoAAAAaxFUAAACtQggAADAwgVQAABgLYIKrIz5syRw+FwT35+foqIyFC/fv30888/F3u7r7zyipYgAerVynbtWickDqldu7b4RVti4cKFatCqqQIDA+Vw0LR169YC++Ufc0HTvffee2WL9pEaNwp4HHdQUJBat

26tDz/88KK3dTGfoUGDBqLgJRoXtflmZrJ4XDojTfeu0jaABv4+boA4HJISEhQvXrldPr0aX3zzTea0HGilqXoz
9//FHly5e/60298soruvfee3XXXd5tDdr1kwbNmzQjTfewEKV+8aRI0d0//33q2vXrpo+fbpcLpfqlq173nVeeU
VxcbGerRVqFDhpcZplVtuucX9y3//v164403FB8fr4yMDD3yyCNF3s7L/Axt3bpVW7ZskSTNmjVLTz/9dInvA7jc
CCq4JjVs2FAtWrSQJHX0oEG5ubka03asli5dggcfffLDE9hMSEqKbb765xLbnKz/99J0ys7M1c0BAw/fvkjrlKLTp
8jHnpuq5ycHLlcrksp0yrlpXz0P50nTop0jpab7311kUflcv5Gfrrggw8kSXfeeac+++wzrv+/Xm3btr0s+wIuFy
794LqQH1o0Hz7sbjt9+rSeeuopNwnSRKGhoQoLC10bNm20bNkyj3UdDocyMjL0t7/9zX2qv00HdpIKPm0/aNagBQU
FaduXerevbuCgoIUFRWlp556SpmZmR7b3r9/v+69914FBwerXLlyGjBggJKSkuRw0DRnzx3v19++UX9+vVTZGSK
XC6XKleurNtvv73QyzNn++c//6k2bdqoTJkyCg40Vuf0nbVhwvaPem+99VZJU++fT20rzj27Nkj80hyZMna8KEC
apZs6ZcLpfWrFkjSdq0aZN69eqLsLAWBQQEqGnTPlq0aJHXdg4d0qShQ4eqWrVqcjQdqlmzpsaPH6+cnJzz7v+uu+
5SdHS08vLyvJa1bt1azZo1c89/8sknat26tUJDQ1WmTbnVqLVLDz30ULG0u1y5coqJidHevXvdx9mvXz/VqFFDgYG
BqLgjhvr37+9enq+wS9z5sxRTEyMXC6X6tev9f9GLU6fPq358+erefPmmjJliiRp9uzZXv3GjRsnh80hLVu2qHfv
3goJCVFoaKgGDhyoI0e0ePStUa0GevTooSVLLqhRo0YKCAhQrVq1NG3aNI9+eXl5mjBhgmJiYhQYgKhy5cqpUaNGe
vvtty/qGACJMyq4TuzevVuSPC5nZGZm6vjx43r66adVtWpVZWVl6V//+pd69+6thIQEPfDAA5KkDRs2qGPHjoqNjd
WYMWmknfr+Hyys7PVqlcvDR48WE899ZTWrvunl19+waGhoXrxxRclSRkZGYqNjdXx48f12muvqXbt2lq5cqX69u3
rtb3u3bsrNzdXkydPVvXq1XX06FGtX79eqamp561j/vz5GjBggLp06aKPP/5YmZmZmjx5sjp06KB//vfvuXWwZVm
zBilatVKjz32mPtyzoW0Tzry+jc00Dn93//pUybNk1169bVG2+8oZCQENWpU0drlqxR165d1bp1a7377rsKDQ3Vg
gUL1LdvX/3+++8aNGiQpDMhpWrvVipVqRefPFF3XDDDDqYYMmTJigPXv2KCEhodC6HnroIcXfemLL75Rq06d30
0//vijNm7c6P6lumHDBvXt21d9+/bVuHHjFBAQoL179+qLL7644LEXJDs7W3v37lWlSpUknQlSMTE6tev9n8LCwnT
w4EHNMDFDLVu21Pbt21WxYsVctzVnzhw9+0CDiouL05tvtvqm0tDSNGzd0mZmZKLWqaH9fLL68Wcd0nNBDDz2k0nXq
6NZbb9XChQs1depUBQUFefW//+671adPHw0bNkw//PCDxowZo+3bt+s//mP/P393f22bt2qESNGaNy4capSpYrmz
ZunJ554QllZwe5LS5MnT9a4ceP0wgsVqF27dsr0ztaPP/54wc8rUCADXEMSEhKMJJ0YmGiys7NNenq6WblypalSpY
pp166dyc70LnTdnJwck52dbQYPHmyaNm3qsaxs2bImpj7ea501a9YYSwbNmjXutvj4eCPJLFq0yKNv9+7dTUxMjHv
+r3/9q5FkPv/8c49+Q4cONZJMqKCKMcay0ePGklm6tSpRXwVzsJNzTWrkZHmpptuMrm5ue729PR0Ex4ebtq2bet1
HJ988skFt5vft6Dp559/Nrt37zaSza033GCysrI81q1Xr55p2rSp1/vQo0cPEXER4a5z6NChJigoy0zdu9ej3xtvv
GEkmR9++KHQ+rKzs03LypXNfffd59H+7LPPGqfTaY4ePeqxrduTU1Ase87mio6NN9+7dTXZ2tsn0zja7d+92v+PPP
NMgevk50SYU6d0mbJly5q3337b3X7uZyJ/fWvWrJnJy8tz99uzZ4/x9/c30dHRRaqxY8e0JiAgwJw4ccIY838/G7N
mzfLoN3bsWCPJPPnkkx7t8+bNM5LM3LlZPY7b4XCYrVu3evTt3LmZCQkJMRkZGcaYM+9nkyZNilQncCFc+sE16eab
b5a/v7+cg4PVtWtXLS9fXsuWLFp4i186c+r/lltuUVBQkPz8/OTv769Zs2Zpx44dl7R/h80hnj17erQ1atTI47T/l
19+6a7vbP379/eYDwsL0w033KDX39db731lrZs2VLgZY1z7dy5Uwc0HND999/v8Vd4UFCQ7rnnHiUmJur3338vzu
FJkl577TULJSV5TFRUe7lvXr18vhlFNeuXfrxxx81YMAASVJ0To576t69uw4ePKid03dKkj799FPFxsYqMjLSol+
3bt0kntXntCuPn56eBAwdq8eLFsktLk3RmjMxHH32kLg494DflilbSpL690mjRYSW6ddf72041+xY08L/f3l7++v
mJvratGiRXr88cc1YcIESdKpU6f03HPPqXbt2vLZ850fn5+CgoKUKFzXs9X/vt2333yeFwuNujo60LX5k9+7dW
rNmjXr37q1y5cpJkv70p28p0Di4wMs/ktzvS74+ffrIz8/PfckuX4MGDDs4cW0Ptvtvuu08nT57U5s2bJUmTWXSt9
9+q0cfffVsrVq3SyZMni103UBCCq5JH374oZKSkvTFF19o6NCh2rFjh1cAWLx4sfr06a0qVatq7ty52rBhg5KSkvT
QQw/p90nTl7T/MmXKKCAgwKPN5XJ5bPfYsW0qXLmy17rntjkcDv373//WHXfcocmTJ6tZs2aqVKmShg8frvT09Ejr
OHbsmCQpIiLcAl1kZKYt8vJ04sSJizqus9WqVUstWrtWmM4eLHvufvPHBz399NPuX/D5060PPipJ0nr0qLv8uXLv
fo1aNDaO19h8t/DBQsWSJJWrVqlgwcPegykbtunZYuXaqcnBw98MADqlatmho2bKiPP/64SMd/6623KikpSZs2bd
L27duVmpqqad0myel0Sjry/udd97RkCFDGrVKm3cuFFJSUmQVKmS/vjjj0K3m//+ValSxWtZQW0FmT17towxuvf
ee5WamqrU1FT35chvvvLGP/744wW37efnpwoVKrjroV8N+W35fUeNGqU33nhDiYmJ6tatmypoUqKdbb79dmzZtKL9
wNkYo4JrUv369d0DaGnjY5Wbm6sPPvhaF//7393P+pg7d65q1qyphQsXevzleu6A18ulQoUK2rhxo1f7oU0HvNqio
6M1a9YsSwfu0Fm0aJHGjRunrKwsvfvuu4VuX5I0HjzotezAgQMqVapUsW7VLqqzX1NJ7jEZO0aNUu/evQtcJyYmxt
23UaNGmjhxYoH9IiMjz7vvG2+8Ua1atVJCQoKGDh2qhIQERUZGqkuXLh794uLiFBcXp8zMTcUmJmrSpEm6777VKN
GDbVp0+a8+wgNDXV/xs6VlpamTz/9VGPHjtVf/vIXd3v+uKjzyX/fCvocFNR2rry8PPdA7MJe59mz22vy5Mle265a
tap7PicnR8e0Hf065fx8deX39fPz08iRiZVy5EilpqBqX//6l0aPHq077rhDKSkpKL0mzAWPA8jHGRVCfYzPnqzy5
cvrxRdfdf82cTgccjqdHr9QDx065HXXj3TmbMj5/goujvbt2ys9PV2fff/65R3v+WYDC1K1bVy+88Ijuuukm96n2gs
TExKhq1aqaP3++jDHU9oyMDP3jH/9w3wl0pcTExKh0nTr69ttvv67E5E/BwcGSpB49uej777/XDTfcUGC/CwUVSxR
wwQf1n//8R19//bWwL1+u+Ph4LS5dsC+LpdL7du312uvvSfZ7mePFJfD4ZAXxut27A8++EC5ubnnXtcmJkYERH6
+00PPd63vXv3av36wRq9c96pW7//3499thjWrNmjdUoEEDfjhh14DoeFNm+cxv2jRIUxK5HjdaFbDDz/o22+/9
WibP3++go0DPe6oyleuXDnde++9euyxx3T8+Hht2bPngscAnI0zKrgulC9fXqNGjdKzzz6r+fPna+DAgerRo4cWL1
6sRx99VPfee69SULl08ssvKyIiwusptjddJPWrL2r5cuXKyIiQsHBwe6//osrPj5eU6ZM0cCBAzVhwgTVrl1bn3/
+uVatWiVJ7nEl27Zt05//Gf96U9/Up06deR00vXFF19o27ZtHn+tn6tUqVKaPHmyBgwYoB49emjo0KHKzMzU66+/
rtTUVL366quXVH9xvPfee+rWrZvuu0MODRo0SFwrVtXx48e1Y8c0bd68WZ988okk6aWXXtLq1avVtm1bDR8+XDEXM
Tp9+rT27NmjFStW6N1331WlatX0u6//+ftr5MiR6t+/vzIzM913F0V78cUXtX//ftl+++2qVq2aULNT9fbbb8vf37
/Iz5IpTEHiInq1a6fXX39dFStWVI0aNFtll19q1qxZ7jEjHslVqpRefvllDRkyRHfffbcefvhpaamuu+yuZBZs2b
Jz89Po0ePLjdQDR06VM0HD9dnn32muLg4d/vixYvl5+enzp07u+/6ady4sfr06e0xfmRkpHr16qVx48YpIiJcc+f0
1erVq/Xaa6+5g2/Pnj3dzzKqVKmS9u7dq6lTpyo60lp16tQpwisInMW3Y3mBkpV/Z0NSuPLXsj//+MNUr17d1KLtX
+Tk5BhjHn11VdNjRo1jMvLmVxRlzfVv//+y6Is23dutXccsstpkyZMkaSad++vTGM8Lt+ypYt67X/gra7b98+07
t3bxMUGFGSCg4PNPffcyLasWGEkmWXLlhljJdl8+LAZNGiQqVevnilbtqwJCgoyjRo1Ml0mTHEfx/ksXbrUtG7d2gQ
EBJiyZcua22+/3XzzzTcefYpz109hffPv+nn99dCLXP7tt9+aPn36mPDwc0Pv72+qVKli0nbsa59912Pfke0HDDH
hw83NwvWNP7+/iYsLMw0b97cPP/88+bUqVMXrNMYY+677z4jydxxyyleyz799FPTVs3U7VqVeN00k14eljp3r27+
eqrry643ejoaHPnnXeet8//+fvNPffcy8qXL2+Cg4NN165dzffff2+io6M97iAr6DNkjDEffPCBqV0nJne6naZu3b
pm9uzZj4+/rx3/Rw5csQ4nU5z1113FdrnxIkTjJAw0PTs2dMY83+fy+TkZ0zZ0/3Z7F//7m80HDBR733//+d90
gQQPjdDpNjRo1zFtVveXR78033Zrt27Y1FStWNE6n01SvXt0MHjzY7Nmz57yvGVAQhZFnvVsE4H0vvPKKXnjhBe3b
t++CZw2ASzVu3DiNHZ9eR44c0e++XaQzD3xr2LChPv300ytUHCcLH8Cn3nnnHULSvXr1LJ2drS+++ELTPk3TwIEDC
SkAIIK4FNlYpTRlCLtTgFPHmVmZqp69ep67rnn9MILL/i6NACwApd+AACAAtbg9GQAAWIugAgAArEVQAQAA1rqqB9
Pm5eXpwIEDCg409npcNwAAsJMxRunp6YqMjPT40tSCXNVB5cCBAx7f1goAAK4eKSkpF3wUw1UdVPK/FyQ1JUUhISE
+rgYAABTFyZMnFRUV5f49fj5XdVDJv9wTEHJCUAEA4CpTLGEBDKYFAADWIqgAAABrEVQAaIC1CCoAAMBaBBUAAGAt

+h8PhMW+M8WrLN2nSJI0fP96rPSoq6rLUBqBwof8zzNclALhMrtTPd3p6ukJDQ8/bx2dBpWLFiipdurTX2ZPffvvn
6yxLvlGjRmkyJHu+by8PB0/flwVKlQoNNzg2nHy5ElFRUUpJSVFISEhvi4HQAni5/v6YoxRenq6IiMjL9jXZ0HF6
XSqefPmWr16te6++253++rVqXUFX1fg0i6XSy6Xy60tXLlYl7NMWCgkJIT/yIBrFD/f148LnUnJ59NLPyNHjtT999
+vFi1aqE2bNpo5c6b27dunYcM4pQwAAHwcVPr27atjx47ppZde0sGDB9WwYU0tWLFc0dHRvwiLAABYwueDaR999FE
9+uijvi4DVwGXy6WxY8d6Xf4DcPXj5xuFcZii3BsEAADgAz7/rh8AAIDCEFAAIC1CCoAAMBaBBUAAGAtggguGtOn
T1fNmjUVEBCg5s2b66uvvvJ15QAu0bp169SszZ09FRkbK4XBo6dKlvi4JLiGo4Kqwc0FCjRgXqs8//7y2bNmi2267T
d26dd0+fft8XRqAS5CRkaHGjRvrnXfe8XUpsBS3J+0q0LplazVr1kwzZsxwt9WvX1933XWJk2a5MPKAJQUH80hJU
uW6K677vJ1KbAIz1RgvaysLCUnJ6tLly4e7V26dNH69et9VBUA4EogqMB6R48eVW5urte3aleuXNnr27cBANcWggq
uGg6Hw2PeG0PVBGc4thBUYL2KFSuqd0nSxmdPfvtN6+zLACAawtBBdZz0p1q3ry5Vq9e7dG+evVqtW3b1kdVAQCu
BJ9/ezJQFCNHjtT999+vFi1aqE2bNpo5c6b27dunYc0G+bo0AJfg1KlT2rVrl3t+9+7d2rp1q8LCwLS9enUfVgZbc
HsyrrhTp0/X5MmTdFdGQTVs2FBTPkxRu3btff0WgEuwdulaxcbGerXhX8drzpw5V74gWIEgAgAARMUyFQAAAYC2CCg
AAsBZBBQAAWIugAgAARVQAQAA1iKoAAAAaxFUAAACatQgqAAqVLZWL2rVr65tvvvF1Kdcsh80hpUuXFrp8z549cjg
c2rp16xWrqSatW7bU4sWLfVoDrk8EFefAc69evV+nSpdW1a9crsr85c+bI4XCcd1q7du0VqeVcM2f0VHR0tG655RZ3
W0H13XrrrT6p71JmDhRbdu2VZkyZVSuXLLibePc9y4iIkj9+vTr7t27i7yNgwcPqlu3bsXaf0maPn26atasqYCAA
DVv3LxfffWVx/IxY8boL3/5i/Ly8nxUIa5XBBXgHLNnz9bjjz+ur7/+Wvv27bvs++vbt680Hjzontq0aa0HH37Yo8
1XX774P//zPxoyZiHxEOjCgkd9//znPwtcPzs7+3KXWGXZWVn605/+pEceeeSStHmSEqKDBw/qwIEDmj9/vrZu3ap
evXopNze3S0tXqVJFLpfRkmq4VAsXLtSIESP0/PPPA8uWLBrtttvUrVs3j8//nXfeqbS0NKlatcqHlJ6RFBABzPKR
kaFFixbpkUceUY8ePby+a2Tt2rVy0Bz67LPP1LhXyWUEBKhl69b67rvv3H3mzJmJcuXKaenSpapbt64CagLUuXNnp
aSkFLjPwMBAValSxT05nU6VKVNGVapU0U8//aSoqCgdP37cY52nnnrK/T1HRd3f8uXL1bx5cwUEBKHWVoaP368cn
JyCn0tNm/erF27dun00+/0WlauXDmPmsPCwtyXKBYtWqQ0HTooICBAc+f0lXQm2NsVx18BAQGqV6+epk+f7rG9X3/
9VX379LX58uVVoUIFxcXFac+ePYXWVhLGjx+vJ598UjfdNMLbcfhcKhKlSqKiIhQbGysxo4dq++//167du1SUlKS
OnfurIoVKyo0NFTt27fX5s2bvdY/+9LPxo0b1bRpUwUEBKHFixbasMxLJdVXFG+99ZYGDx6sIU0GqH79+po6daqio
qI0Y8YmD5/SpUure/fu+vjjjy97PcDZCCrAWRYuXKiYmBjFxmRo4MCBSkhIUEffh/XMM8/ojTfeUFJSkSLdW9WrVy
+Pswe///67Jk6cqL/97W/65ptvdPLkSfXr1++162nXrplq1aqljz76yN2Wk50juXpN6sEHHyzy/latWqWBawdq+PD
h2r59u9577z3NmTNHEyd0LHTf69atU926dRUSEnJRNT/33HMaPny4duzYoTvuuEPvv++nnn/+eU2c0FE7duzQK6+8
ojFjxuhvf/ubu/by2FgFBQVp3bp1+vrrrxUUFKSuXbsqKyur0P0EBQWdd/LV5ZTAwEBJZ84mpaenKz4+Xl999ZUSE
xNVp04dde/eXenp6QWum5GRoR49eigmJkbJyckaN26cnn766Qvuc9iwrYd8PQo705iVlaXk5GR16dLfo71Lly5av3
69R1urVq28LgkBL50B4Na2bVszdepUY4wx2dnZpmLFimb16tXu5WvWrDGSzIIFC9xtx44dM4GBgWbhwXGGGMSEhK
MJJOYm0jus2PHDiPJ/0c//7lgDe3btzdPPPGEE/61114z9evXd88vXbrUBAUfMv0nThV5f7fddpt55ZVXPpbz0Ucf
mYiIiELre0KJJ0zHjh292iWZgIAAU7Zswfe0ZMkSs3v3biPJ/frli4qKmvPnz/doe/nll02bNm2MMcbMmjXLxMTEm
Ly8PPfyzMxMEXgYaFatWLVofT//PN5p/379xe67tkSEhJMaGhokfpeaN2ULBRz8803m2rVqpnMzEyy/jk50SY40N
gsX7fz3bLfmYxhJzHvVwVfCwsJMRkaG/mMGTOmJLNLy5ZC6zh8+PAFX4/s70wC1/3111+NJPPNN994te+c0NH
UrVvXo23ZsmWmVKLSjJc3t9BagJLm56uABNm586d2rhxo/v0Bj8/P/Xt21ezZ89Wp06dPPQ2adPG/e+wsDDFXMRo
x44d7jY/Pz+1aNHCPV+vXj2VK1d003bsUKtWrS6qrkGDBumFF15QYmKibr75Zs2ePvt9+vRR2bJli7y/50RkJSUle
ZxByc3N1enTp/X777+rTJkyXvv9448/FBAQUGBNU6ZM8XhNiIid0TIEUynyq0PIkSNKSUnR4MGD9fDDDD7vbc3JyFB
oaKklKtk7Wrl27FBwc7LGP06dP67///W+hr0vt2rULXXYlpaWLKSgoSMYY/f7772rWrJkWl14sp90p3377TS+++KK
++0ILHT58Wlm5ufr9998LPbuxY8c0NW7c20P90PuzVpjw8HCFh4df0nE4HA6PeW0MV1tgYKdy8vKUmZnpPnMEXG4E
FeD/mzVrlnJyclS1aLV3mzFG/v7+0nHihMqXL3/e9c/9T/3c+cLaLiQ8PFw9e/ZUQkKCatWqpRURVhR4F9D59peXl
6fx48erd+/eXn0KCYMVK1b0GhtztipVqngFhfygcnaAyr9D5P3331fr1q09+pcuXdrdp3nz5po3b57XfipVqlTg/q
UzL37057bbbtPnn39+3j4LITg4WJs3b1apUqVUuXJlj+MfNGiQjhw5oqlTpyo60loul0tt2rQp9JKWKeAyyIEMGzb
MPR6oMNU3b1f16tW92itWrKjSpUvr0KFDHu2//fabKleu7NF2/PhxLSlThpCCK4qgAuJMX/gffvih3nzzTa9r9ffc
c4/mzZunP//5z+62xMRE93/6J06c0E8//aR69ep5bG/Tpk3usyc7d+5UamqQR5+LMWTIEPXR10/VqlXTDTfc4HG7c
FH216xZM+3cuf0izkI0bdpUM2bMKPAv66KqXLmyqlatql9++UUDBgwosE+zZs20c0FChYeHX9R4mAs9V+RK/TitVa
pUoa/rV199penTp6t79+6SpJSUFB09erTQbd1444366K0P9Mcf7j7rT0xMvGANL7300gXHskRGRhbY7nQ61bx5c61
evVp33323u3316tWKi4vz6Pv999+rWbNmF6wHKFE+vFAEWGLJkiXG6XSa1NRUr2WjR482Tzo0Mcb83xiVBg0amH/9
6l/mu+++M7169TLVqlD3j0LISEgw/v7+plWrViYxMdEkJyebNm3amJtvvrlItZw7RsUYy3Jzc01UVJRxOp3m1Vdf9
VhWlP2tXLnS+Pn5mbFjx5rvv//ebN++3SxYsMA8//zzhdZx90hR43Q6zXfffeRrRPGVJwtf4zKuWmp3n//fRMYGG
imTPlqdu7cabZt22Zmz55t3nzzTWOMMRkZGaZ0nTqmQ4c0Zt26deaXX34xa9euNc0HDZcpKSLFeMWKZ+/evWbLli1
m/PjxJigoyGzZssVs2bLFpKenF3kbFxf0qRJE905c2ezfft2k5iYaG677TYTGBhopkyZ4u5z9uuZnp5uKlasaPr3
729++0EH89lnn5natWtfcIzKpVqWYIHx9/c3s2bNMtu3bzcjRowwZcuWNXv27PHo1759e/PSSy9dtjqAghBUAGNMj
x49TPfu3QtclpycbCSZ50Rkd1BZvny5adCggXE6naZly5Zm69at7v75v7z+8Y9/mFq1ahmn02k6duzo9Z9+YqoKKs
YYM2bMGF06dGLz4MABj/ai7m/lypWmbdu2JjAw0ISEhJhWrVqZmTnnreWfv36mb/85S8ebRcbVIwxZt68eaZJkyb
G6XSa8uXlm3bt2pnFixe7lx88eNA88MADpmlFisblcplattWqZhx9+2KSlpZ23vksRHx9vJHlNa9ascfeJjo42Y8e0
LXQbFwoqmdvNlatDAul8vUqVPHfPLJjY60rrQoGKMMRs2bDCNGzc2TqfTNGnSxPzjh/+47EHFGGP++te/mujoa
ON00k2zZs3ML19+6bF8//79xt/f/7KGR6AgDm0KeVEUuA6tXbtWsbGx0nHiRKfPM50zZ45GjBih1NTUET33ww8/rM
OHD3s9X01y7U+Svvvu03Xq1KnAwa7Xuj/++ENhYwFasWKfYmNjFV20zz3zzDNKS0vTzJkfV0KrjOMUQESL5aWpqS
kJM2bN0/Lli27ovu+6aabNHnyZ03Zs+eSH4x2tfnyyy/VsWNHqsr/Fx4eXqRnugAljaACWC4uLk4bN27U0KFD1blz
5yu+//j4+Cu+Ttxt07drLin3f09XgmWee8XUJuE5x6QcAAFiLR+gDAABREvQAAIC1CCoAAMBaBBUAAGAtggoAALAWQ
QUAAFiLoAIAAKxFUAEAAANYiqAAAAgV9PzrGkUpk0FQMAAAAAELFTkSuQmCC",

"text/plain": [

"<Figure size 640x480 with 1 Axes>"

]

},

"metadata": {},

"output_type": "display_data"

}

],

```

"source": [
  "sns.barplot(x='Type', y='Rating', data=df3)\n",
  "plt.title('Ratings of Free vs Paid Apps')\n",
  "plt.xlabel('App Type (Free = 1, Paid = 0))\n",
  "plt.ylabel('Rating')\n",
  "plt.show()"
],
{
  "cell_type": "markdown",
  "id": "ab4a10aa-c8a5-4b57-8b2a-569f2a11ff81",
  "metadata": {},
  "source": [
    "#### number of reviews affect app ratings"
  ]
},
{
  "cell_type": "code",
  "execution_count": 121,
  "id": "belabc24-64d0-4cfa-b32b-b5c9bc79db92",
  "metadata": {},
  "outputs": [
    {
      "data": {
        "image/png":
"iVBORw0KGgoAAAANSUHEuGAAAjCAAAHFCAYAAAA0mtghAAAA0XRFWHRTb2Z0d2FyZQBNYXRwbG90bGliIHZlcnNp
b24zLjguMCwgaHR0cHM6Ly9tYXRwbG90bGliLm9yZy81sbWrAAAACXBIWXMAAA9hAAAPYQGoP6dpAABjYkLEQVR4n
03deVhU9f4H8PfsWzYoq5CAKKiJqCimBK6YpmZatpmVS9ebP5frzSzTyuWwodXtmkuaWajX1Ba0rMzUVEzFUN07ha
aJigoSigzrDDNzfn/gTAzMMAMzADv1/PME3P095zz0UzDfDzLe0SCIAggIiIaiLEzi6AiIiIyJHY3BAREVGTWua
GiIiImhQ2N0RERNsKsLkhIiKiJoXNDRERETUpbG6IiIioSWFzQ0RERE0KmxsiIiJqUtjcEDUS69atg0gkMj2kUimC
goLwxBNP4Pz58w2y7UuXLtXrdhqDNm3amL00Hh4e6N690lasWIG6Br4fPnwYcXysw03bt6vM69+/P/r3729f0UTND
JsbokYm0TkZaWlp2LNNd6ZNm4bt27cjISEBeXl59bbN4c0HIy0tDUFbQfW2jcYkPj4eaWlpSEtLw3//+1+4u7tj+v
TpSEpKqtP6Dh8+jIULF1psbt5//328//77dLZM1LxInV0AEdV0586dERsbC6D8X/V6vR7z58/Hl19+iQkTJtTLNv3
9/eHv718v626MwRogd69e5ueDxo0CKGhofjggw8wd+5ch26rU6d0Dl0fUXPAIzdEjZyx0blx44bZ9GPHjuHBBx+E
j48PLeolYmJi8Nlnn5nmnzp1CiKRCB999FGvdX733XcQiUTYvn07A0unpfbs2YPEXESoVCq4u7sjPj4eP/zwg2n+r
7/+CpFIhM8//9w07fjx4xCJRIiKijJb14MPPogePXqYnu/duxf9+/eHr68v3NzcEBoaitGjR604uNjq72LUqFEICw
uDWwCoMq9Xr17o3r276fnnn3+0Xr16wdvBg+7u7mjbti0mTpxodd3VUalUaN++fZXXYPfu3Rg5ciRat24NpVKJiIg
IPPfcc8jNzTWNWbBgAV588UUAQHh4u0l01/79+wFUPS116dIliEiqvPP003j33XcRhh40T09PXMxf4ciRI1Vq+/DD
D9G+fXsoFAp06tQJmzZtwvjx49GmTZs67StRY8DmhqiRy8jIAAC0b9/eNG3fVn2Ij4/H7du3sXr1anz11Vfo1q0bH
n/8caxbtw4A0LVrV8TExCA50bnK0tetW4eAgAAMGzbM6nY3btyIwYMHQ6VSYf369fjss8/g4+0DIU0GmBqcqKgoBA
UFYc+ePabl9uzAZc3N/z222+4fv06AECn0yE1NRWDBg0CUP4BPnz4cMjLcnz88cfYuXmNF9eDA8PD2i1Wqs1TZw
4EVeUXMHvXvNpp89exY///yz6chWwloaHn/8cbRt2xZbtmzBt99+i3nz5kGn01ldd3V00h0yMzPNXgMA+00PPxAX
F4dVq1Zh165dmDdvHn766SckJCSgrKwMAPC3v/0N06dPBwBs3brVdLqrYiNmycqVK7F7924sXboUn3zyCYqKijBs2
DDk5+ebxqxZswZ///vf0aVLf2zduhWvvvoqFi5caGqciJosgYgaheTkZAGAc0TIEaGsRwoKCqQdu7cKbRq1Uro27
evUFZWZhrbsWNHISYmxmyaIAjCAw88IAQFBQl6vV4QBEFYtmyZAEA4d+6cacytW7cEhUIhvpDCC1W2nZGRIQicIBQ
VFQk+Pj7CAiBEjzNav1+uFrL27Cvfcc49p2LNPSPW0bdvW9HzQoEHcPEmThJYtWwrr168XBEEQdh06JAAQdu3aJQic
IHxxRcCAOHkyZ01+h2VLZUJgYGBwPnPPmk2/aWXXhLkcrM5srCIIGvPP00wIA4f1627d6npGRIQAQoQ0jBZ10Z5
r+888/CwCEZs3C4JQ/lq0atVK6NWrl9n6Ll++LmKhMiEsLkZw+07UWPDIDVEj07t3b8hkMnh5eeH+++9Hy5Yt8dV
XX0EqLb+E7sKFCzh79izGjh0LoPyogvExbNgwZGVl4dy5cwCAsWPHQqFQmI7mAMDmzZuh0WiqvX7n80HDuHXrFsaN
G2e2foPBgPvvvx9Hjx5FUVERACAXMREXL15ERKYGSKtLcfdGQdx///0YMGAadu/eDaD8aI5CoUBCQgIAoFu3bpDL5
fj73/+09evX4+LFizX63UilUjz11FPYunWr6QiGXq/Hf//7X4wcORK+vr4AgJ49ewIAHnsvMXz22We4du1ajdzvTG
PHDshkMshkMoSFheHDDz/E8uXLMXz4cLNx0Tk5mDx5MkJCQiCVSK3jASA9Pb1W26xs+PDhkEgkpuddunQBAFy+fBk
Ac07c0WRnZ+0xxx4zWy40NBtx8fF2bZv11bG5IWpkNmzYgKNHj2Lv3r147rnnkJ6ejjFjxpjmG6/7mDVRlukD2PiY
MmUKAJiu+fDx8cGDDz6IDRs2QK/XAyg/JXXPPfdUuSamIuM2HnnkkSrbWLJkCQRBwK1btwDAdKppz5490HjwIMrKy
jBw4EAMGjTIdPpqz549iI+Ph5ubGwCgXbt22LNNdWICAjB16LS0a9c07dq1w3vvvWfz9zNx4kSUlpZiy5YtAIDvv/
8eWVLZs1a37598eWXX0Kn0+GZZ55B69at0blzZ2zevNnm+gEgISEBR48exZEjR/Df//4Xbdq0wbRp03Dw4EHTGIP
BgMGDB2Pr1q146awX8MPP+Dnn382XRdTuLJS021ZY2zUjBQKhdL6b968CQAIDAyssqylaURNce+WImpk7r77bTNF
xAMGDIber8fatWvxxRdf4JFHhGofnx8AYM6c0Xj44YctrqNDhw6mnydMmIDPP/8cu3fvRmhoKI4ePYpVq1ZVW4NxG
8uXLze7a6gi4wdo69at0b59e+zZswdt2rRBbGwsWrRogcTEREYzMGU//fQTjhw5goULF5ot36dPH/Tp0wd6vR7Hj
3D8uXL8c9//h0BgYF44oknrNbWqVMn3HPPPUh0TsZzz2H50RKBACHY/DgwWbjRo4ciZEjR0Kj0eDIKSNISkrCk08
+iTZt2iAuLq7a/f29ja9Br169UKvXr3QtWtXtJkyBsDpNoRyLMB//vc/nDp1CuvWrc04ceNMY164cKHadTUsfmp
fJEzAGRnZkdIDUT0wiM3RI3cW2+9hZYtW2LevHkwGAzo0KEDIiMjcerUKtKGxlp8eHl5mZyPfhg7rrrLiQnJyM50
RLKpdLsSJA18fHxaNGiBX777Ter25DL5abxgwYNwt69e7F7927cd999AMovgA4NDcW8efnQVLZm0sJTMuQ1Qa9evb
By5UoAwC+//GLzdzJhwgT89NNP0HjwIL7+++muMGzf07BR0RQqFAv369c0SJUsAACd0nLC5/soiIyPx0ksv4cyZM/j
0008BACKRyLT+iJ744A0LNQD2H82pqE0HdmjVqpXZXHIAc0XKFRw+fNhh2yFyRTxyQ9TITwZEnPmzMFL72ETZs2
4amnnsIHH3yAoUOHYSiQIRg/fjzuuusu3Lp1C+np6fjll1/Mbs2WSCR45pln806770KLUuHhxx+Gt7d3tdv09PTE8

```


DB00qMbLxMTEICGoCImJidi3b1+1YzUaDdRqtdnDkYw5N9XlyPx4PtFqaRpjHk1FFXNxpBJxtRkzFbNsKqucf/Pjn
fUa2cq+CfBSILew/HCrh0J3Sq5ydyrkelTNAbg67mv2qSWZic8kcaS77SeSK+P5zXU49LbVlyxb88ssv0Hr0aI3GBw
UFYc2aNejRowc0Gg3++9//IjExEfv370ffvn0tLp0ULISFCxc6smwz6go5NtWpbn7FPJqK4wtL9RCLqs6ztWx1263
4vCY1F5SWQQBQWlb7/auY61E5A8Twtm3t163Mk0aS0dJc9pPIFFH957qc1txkZmZixowZ2LVrF5Rky0c1KuvQoQM6
d0hgeh4XF4fMzEy88847Vpub0XPmY0bMmabnarUaISeh9VfgapCjk11qptfMY+m4nhPpQQScfXrtbRsddut+LwmN
Ruz0aSS6oP8LK2rYq5H5QwQW9u2tV+2Mk0aS+Zic9lPILfE95/rctppqePHjyMnJwc9evSAVCqFVCpFamoqli1bBq
lUCr2++n+5G/Xu3Rvnz5+30l+hUEClUpk9HMMYc1NdjkyfSD/kqEstzjPm0VRUMRdHpzdUmzFTMcumssr5N33urNf
IVvZNT0EGfp5y+HnKUaTRW63DU505VyPyhkgNrddzX7VJD0kuWSONJf9JHJFFP+5LqC1N4mJiThz5gx0njxpesTG
xmLs2LE4efIkJJLq/+VudOLECQQFBdVztDYZc27Sr+dbzaGZ2r8derTxsZgTs+DBzpidcto0zZhZy8zFmfrJL1jwY
GeLy1b0sqk835hfY3w+/8H0iI/wM2XrGLNvKq/beLFuGpB+pjs/2vi4W6yJT4QfpG8wz9mxl0tR0QPE2raNdc900W
1xfk0zQ5pL5khz2U8iV8T3n+ty+t1SFFXv39/sbqk5c+bg2rVr2LBhAwBg6dKlaN0mDaKioqDVarF40YsXrwYKSk
pePjhh2u0jYb0uZFJxBADKiHFKKuQL+PLJoVCKob0YIBUJMBNIg08FDJ4yiUQASgs05tyZzwVUpTq9MgvLn+ulJXn
yxjHeLlJobiTVV0o0cFTIYwn/E70TUl51oaHXAI3mQT+KiXyi7W4odYgv7QMKjcp3KV38ndK/xorEoBbJvP4Kv/Kb
Mgv1kjdUmY21lMugUImQUGrka5HhUzQFQVcmxM610W59yoSyzPr21mSHPJmmG2CpHz2PP+Y0Z0zTW6nBtrsrKyc0
XKFdNzrValWbNm4dq1a3Bzc0NUVBS+/fzBDBs2zIlVlufczN1WNCpmjVHRUAoGXCNuYvKp5/FjpSyZCXdyahqEtsS
EhDaYvPEXL8Tg/f3XTAbWzmzp+kH6b0b4dnK2TLVB5jzMsplTNgdeof+HvfdgjzCqCAFgnle0v7sxjbKww6vQH/
2nehSnbNhIQ2mlapfF0VMxusvekCatgnWsoACbSxrK35td1efXB21gWzVYicp67vP2f/3WjKX0rITU0or5wbazk0S
Q9FY+62M2bNiLHffJg+d5qTmmBWWmQWsTRmeHQQrueX4sSVPDzQJRgD0wZg1uen0DWkBYK9lfj2TJb1bJ4IX3StsC
5mNljHrAsiqi3+3ai9RpVz09gZc24s0XjhJgqleouNDWceD/NjLTNRGLXLBWBoTqFKAmmUCvBTIKyrPZYgJaYfAlDj
6Nk+ldTGzwTpmXRBRbfHvRvly6dNSjYEx58aaAhvzK+a92JNZU5MxGp0B6lKd1WvtRyUzDZYx64Kiaot/N+oXmxs7
GXNurPGyMb9i3os9mTU1Ga00iqFSSQ0ua2tdzGywjFkXFRb/LtRv3hayk7GnBtLEiJ84SmXoE+E5RyEivkwfWqZW
WMpW8bSmBvqUL0mTE6BBi09ynMZTmTexg11qfVsnkrrYmaDdcy6IKLa4t+N+sXmxk7GnBtLEs2LHoqGzGDA9MSIKg
208W6pJw9m3Lk7qTzbZdqACFMOTcV1Vcys6RPph2mVsmUqjzHm5QR5u+G36/mm3JpAlRKL3fBuSwlgrzdMG1ARNV
snjv1GNfFzIbqMeuCiGqLfzfqF++WcpCrecVmWS+ecgmUgoCb0j2UEgmkd3JpjPktcokYecVaeCqkEv+yrrxkktQ
Jgjl3+tUooP7nZwbjU6P/BD30USeMglkIpEKKiUTV0i00NDXL6Mu0yCMoMBeoMaD5kULdxLZm+W/GITbhzpYRAES
EQilJTpUazVw9tNBpWbzJQ1w8yUmmPWDBHVFv9u1FyTyblpjIytogBAIxJBLBLhzyItVEop3GRiKCUK3CrWwiCTwM
ddDplYhGK9Hl5uMsjEYuRrd0Uhf0opfD3lkIjKD6+V6cvTAAvIEcQiQITya2IM8vKQ04lIhFYqJToEyklvliKNHio
3mamxsRYWZZxepjdAlhVDXVKGYq00LT3k00MuJhbBE+FBnKJGLdLT0XN1J1lwYrrAoCbRVroDAIMgoBijQ7e7nKz
UKqmHFjlyKyZpvx7IqK/MK0qfrC5cQBRIX4LHoxC9m0NjN9y3BS+98/ESKhLdXjqo58RE9oC/xgYiVYqBa7n12KFh
TC9aQMjAAiYs06vwL4+kX6YP6IT3tyRjr1n//xrfKQfFo3qjH998xv2p0eYpveN9MMbFqbfD3cAXnugE1758n84fj
kPy8bE4K3vz+HEldumnw9VCh58NiEct4rKsPbgRfNaI/0wfwAECjU6fHTQPKvHGEoLAvASA6tsYrAXEZF9eFrKtRZ
C/KYNjMDBCzdNYXh9Iv0wtH0r8mbmTnjf1IERWL73gtUwvaF3gvgqBvYLRPiiW6U0u9P0nzYwAieU50HkZtWf7ZW
z9xt/6sy782H0mPhmSwcLbC30g/DI00wpytZyz0Y2BV0QZ7ERFZxhC/BmQrxM9DITULw/vxf4kpwA8oD8zvUEirD
d0r0L7iuitPq+10Y7hfdT9bq8eSJSXSYmMDlIdSBXgprM5jYFU5BnsREdmPp6XsZCvEr7BUbzN8r7bhfy6aXjngz9
bydd1uTeYzskocg72Ii0zH5sZ0tkL8PJUSFGurD9+rbXiFo6ZXDvitzXdxdtluT+QysKsdgLyIi+/G0LJ1shfgVaXR
mYXh9Iv1MwXpA+TusRRpdtWF6FcdXXHflabWdfiLztqL2Y9Bf5Z+t1WPJDXUp+lhZrm+kH3IKNFbnMbCqHI09iIjs
x+bGtTWf+C14sD00ZYJZ+N4/E8uD9T4+mFEetDcwEkEqpdUwvWkDI9H039MssK9PpB8WPBiF367nm4+P9M0bD0XjX
JbabHpfK9PPZanx5kPR6Bvph48PZmBCFdjiI3znfq4oPsIXEXLCEeTtVmV/+0T6ISLAExMSqi5nDKXq396fgVU2MN
iLiMh+vFvKQYwhfsaQPk+5BEoAeTo98ovL4KmUQSkVo8xggEwshkavh7tMitI74XwqpRRKmQRFgh2KNHp4KqVQsSw
QiUuoMwgoLt0jWKOHyk0K05KEYgCLBgEL2vLwPZWbFDKxCKRC053Mmgqh0JZC4v6KxenDN5ucmj1BpRodaafizQ6
eNwJG8wv0cKzQs5NfkkZ30USi0/k78jFYmj05eGBxLDAiqFUDKyqGf6eiIjMMcSvgnVnLuXlJVDQ0nLuBtgEqjEs+i
pjQFpgQH47NP13Gaw9Eiem7dHz3vxumZfrC+dd5p+DyLJPMm0XiVf1SNf8m0g/TBkRgwrqjpuybhAhfvPZAFMauTU
OnIBUWj+6CdgGeZnVaC4uqYiUh+knvaEEC77+tVZ5LAysqhn+noiI6o6npex0Na+45mMDlN96/eqXZzAkKhjJBzM
wMSEchy7cRPKHdNwd7I1XvzyDR3qEmC3z4/lcvJxyGvnFWtxQl+LHC7LVGhvjuBV7z2NiQrjZ9l7/5lcsGd0FBYqs
p77kf2urBM0BaJBtExERVYfNjZ1s5dwUavX4sULGzKE7Px+8cBMBqqq5L8Ysk7wiLQJVymrzZixl3xjXwd+ZKMxjI
SIiV8XTUnaylXNTcGe+pRwZa/k2BaVl00qF0uXGVFxfnfWaiMI+FiIhcFZsb09nKufG6M99SjoylFBsvpQxleoPNBs
FSbkzFddZjgrzWIIiYfXxtJ5db0XcMc0L6FMHyb+zs8JE7IUVfNfTfmmBT0kCNHXVpt3oyl7Bvj0us7E4V5LER
E5KRY3NipupybRQ9F4/fxrt2NC0rgp12CzcfDjSr+dy0UPR+0J4ptkyfSpkmQsQlEiI8L0cfxNznn9TmfmsIcX580ZE
YXbK6QbJRGEeCxERuSrm3DiImefGmEviKZdAbNBDKXiJr0gLN7kUIgAQAR4yCfKKS+GpVJTnyJTqoHKTICBLUaUpy
FGXokijM+XcelVJEKhS0KMz4FaRfUrS8owcD7kE+SVauMkbNh0FeSxERNQqMHPjRBVbRbLYAo1BDw+FFBABcokYco
KYRVodSnUiYpUGtHSXo2Mr6y9SgJVv4LY0L6RCBk19u6EuRZ6xuXKTIqiFm9VvCycioubB+A9edWl5oK2fh3P+wcv
mxgGqC/HzEkwm6ucM3Bvpjy0/XcGkvm3R0k00KZ8cR26hFgkRvnjzoWiE+jZcY2KvKzeLMMfC/ja2/SAiIse5fruk
Sv6ZrWDX+sJrbuxkK8SVASmJw9H8qEMdAxWYcX8zh+6RaWj05iGjd32xmrX0bpam6oS6s0NKdj2w8iInIcVwtZ2
XNjp5qE+BVP9abwvh8v3ESASmkW4Hfwwk3kFTW00Lu8Im21+9tY9o0IiBzH1YJdeVRKtjUN8QP+Ct3T6AxVAvzUpT
rHF1cPbNXZWPADiIgcx9WCXdnC2KmmIX7AX6F7Cqm4SoCfStk4XgpbdtAw/SAiIsdxtWBXnpayU01C/DzkELN4X58
IX+SoS80C/BiifNHSo3HcPt3SQ17t/jaW/SAiIsdxtWBXNjd2shXipwSw7LAGJsSH4+x1NaYNjERSuA9mp5w2jXvz
oehGcxt1oEqJN63sb2PaDyIichXC3Z1mRC/pKQkzJ07FzNmzMDSpUutjktNTcXMMTPx66+/Ijg4GC+99BImt55c4
+3Ud4ifuqT83n5PuQRKgx55esAAAAIgFgPuUglK9HrkFZWH77X0KE8jrpwN4KmQokijQ36Jc7MCrDHLuamwH87mKh
kLRFs078nmpT6DXRtdiN/Ro0exZs0ad0nSpdpXGrkZGDZsGCZNmoSNGzfi0KFDmDJLCvz9/TF690gGqraq6nJufv4
jG8G+nth45DKe7BVmyroJ9XFH0J37/i1lAyRE+GJ8fdj+sfeirV6p2UFWB0oUrpEM10RK2UsEBHfk82Rt7trNK90
Py1VWFiIsWPH4sMPP0TLi2rHbt69WqEhoZi6dKlUvPvuU/G3v/0NEyd0xDrvvvNNA1VZLK+emX8dWSD6YgU7B3mZZN
t//xP5vVqr2QAHl9xE8qEMTEwIB+C8rIDGwtUyFoia074nyZmc3txMnTovW4cPx6BBg2y0TUtlw+DBg82mDRkyBM
e0HUNZmeXbzDQaDdRqtdnDKWqSc/PjnYwbs6wLwVyC7XVZGMYxxs5IyugsXC1jAWi507vSXImpzY3W7ZswS+//IK
kpKQajc/0zkZgYKDZtMDAQ0h00uTmWn4TJSUlwdb2/QICQmxy+6KappzUzHjxvjfgtIym9kAxxvGm9TVwVkBj4WoZ
C0TNHd+T5Ex0a24yMzMxY8YMBNy4EUplza/dEiLEZs+N10NXnm40Z84c50fnmx6ZmZl1L9qCmubcVMY4Mf7XSymzm
Q1gHG9aXwNnBTQWrpaxQNTc8T1JzuS05ub48ePIyclBjx49IJVKIZVKkZqaimXLlkEqLUKv11dZplWrVsjozjablp
OTA6LUC19fy9krCoUCKpXK70FINcm56XMn48Ys66ZAAZ9PebXZAMbxRs7ICmgsXC1jgai543uSnMlpzU1iYiL0nDm

DkydPmh6xsbeY03YsTp48CYLEUmWZuLg47N6922zarl27EBsbC5nM0f8KsJVzk3o2GxMSwvHb9XyzrJsB7f1NV5Vb
ygZiIPDFhPhwfHwwA4DzsgIaC1FLWCbQ7vieJGdymZwbA0jfvz+6detmyrmZM2c0rL27hg0bNgAovxW8c+f0e0655
zBp0iSkpaVh8uTJ2Lx5c41vBa/vnJuCkjj4GXNuI0C2zgD9nd+wWATIjGJIRCJ4u8nM3tyVswE8leU5N+oSx2cFNG
X1mbFARLXH9yQ5SqPLubEmKysLV65cMT0PDw/Hjh078Pzzz2PlypUIDg7GsmXLnJpxA1jPuVnwYGeIRCDiLYdRrNU
jIcIXrz0QhbFr09ApSGWW9eAq2QCnHX+PRK6F70lyBpc6ctMQHH3k5mpeMWannLZ403hChC+mDYzEwQu5WLH3gmna
hPhwPLv+GPPg+mH5mBi+8YmIiGyozee303NuGjtb0TceColZV3BCzcRoFIAYNYDERFRfWBzYydb0TeFpfoqWTWfP
X/dCcasByIiIsdic2MnWzk3nkpJlawaT+Vfd4Ix64GIiMix2NzYyVb0TZFGb5ZVxkDhixy1BgCzHoiIi0oDmxs7VZ
dzs+DBzvD3kpmYahIiDFvRBRmp5xmIgMREVE94d1SDmLKubmT5eAhl0AB4LZ0D3WJD14KKTzkEuSxa0EmZ9YDERF
RbTSZnJvGyNgqigCIiCBNKkarAE9TixMCj3rbtjEsS1laBpWbDH4ebKCIiKj5YXPjANZC/N4YFQ29oMcffxYiyNsN
QXcC++rD9dsLmJlyGj+e/+vb0ftG+pkFBRIRETUHV0bGTLfziqs0NkB5ns2rX56BCGKcu1GI/b//ifzi+sm0yS/WV
mlsgPIcnZdTtTfbdomIiFwRmxs72Qrx0+gMCPBSIMBLUW+BfbmF2iqNjRGDAomIqLnhaSk72QrxKygpM4X41Vdgn9
rGehkUSEREzQmbGzvZCvHzcp0hQKMr/7meAvtUNtbLoEAiImp0eFrKTrZC/BRSMXIKNMgp0NRbYJ+fpxx9I/0szmN
QIBERNtdsbuxUXYjfooeiIcCADOGeGNDev95uy/Z2L2Px6C5VGhwGBRIRUXPEED8HMYX4LZTBy00GT7kESggoRnnm
TYn0gKJSHbyUMsglytWu0cJT6dgsGmP0jTFIkEBRETUVDDer4FVL3PjIRsjS0S06Z+cw085hQCA+AhfTIgPx5gPp
0JsWEuHZdF4u70ZISiI4mkp09nKuSkVu+PVL89g5VPdTfM0XbiJ5EMZmJgQziwaIiIiB2NzYydb0TeFwJ00XrgJnd
787N+hCzRE9ICALNoiIiIHInNjZ1qknNT8b8VGfNvAGbREBERO0qbGzvVJ0em4n8rUkj/+vUzi4aIiMgx2NzYyVb
0jadcgOQIX0glIrN58RG+0JF5GwCzaIiIiByJzY2db0XcKA3FWPRQNKZu/MU0z3i31McHM5hFQ0RE5GDMuXEQH7N
nYwZT7kESoMepWIJDAYDND0BxVo9vJRSyCVi5Jdo4aFgFg0REVFNM0fGicxaRbEYKjeZlebFo6FKIiIaIbY3DhAd
SF+KNYgS6tHkANC+oiIiMg2XnNjJ5shfiIx9v/+J0P6iIiIGgibGzvVJMqvEvBkd4iIqIGwubGTjUJ8dPoDAzpIy
IiaiBsbuxUkxA/hVTMkD4iIqIGwubGTjUJ8csp0Dckj4iIqIGwubGTzRA/wYAB7f2ZZUNERNRAnHor+KpVq7Bq1Sp
cunQJABAVFYV58+Zh6NChFsFv378fAwYMQDI9PT0dHTt2rM9SqxXm64Hf07uUh/iVLMHL7U6IHwC5u4KNDRERUQNY
anPTunVrLF68GBEREQCA9evXY+TIkThx4gSioqKsLnfu3DmzdEJ/f/96r7U61eXcCCVLAJsbIiKiBuNyX7/g4+0Dt
99+G88++2yVecYjN3L5eWjRokWdlu/orl+4mleM2SmnLd40nhDhi6SHoiEWi3BXS3e7t0VERNRClebZ22WuudHr9d
iyZQuKiooQFxdX7diYmBgEBQUHMTer+/btq3asRq0BwQ02ezhSTXJu1KU6h26TiIiIrHN6c3PmzBL4enpCoVBg8uT
J2LZtGzp16mRxbFBQENasWY0ULBRs3boVHTp0QGJiIg4c0GB1/ULJSfD29jY9QkJCHFp/TXJumHFDRETUcJx+Wkqr
leKLlSu4ffs2ULJSsHbtWqSmpLptcCobMWIERCIRtm/fbnG+Rq0BRqMxPVer1QgJCHYaan0LDWgVveJ1fnfzegDA
Lg7yHHfQE5ERNtCNkrTunK5HBEREYInjUVSuhK6du2K9957r8bL9+7dG+fPn7c6X6FQKQVSmT0cqSY5NyoLv5+UiI
iooTi9ualMEASzIy22nDhxAkFBQfVYUfVs5twAvJiYiIioATn1kMLcuXmd0hQhISEoKcGAfu2bMH+/fuxc+dOAMC
c0XNw7dolbNiWAQcWd0LstGnTbLFRudBqtdi4cSNSULKQkpLizN0wy7LrL5RBZcy5EYvgz8aGiIioQTmlublx4wae
fvppZGVlwdvbG126dMH0nTtx3333AQcysrJw5coV03itVotZs2b2rVrchNzQ1RUFL799lsmGzbmWbsAoPqcG9wsg
r+vXh0rIyIaI6cfkFfxQ3NGzo1EIkZwCze7t0VERNRCNaolihu7muTiC5Nu4XZyIiIgh7fx2Kkm0TcQNVAXREREx0
bGXio3WbXzvWzMJyIiIsfiaSk7LSTnxpsNDHERUYNhc20nmuTc8GJiIiKihsPTUg50MeemoLQMXS070TcSMfz2BA
RETUoHrlxMLMb6/V6ZN0ucVotREREzRGP3DhAdSF+HmVaXLlpQCid/IiIiBoEj9zY6WpecZXGBijPuHnlyzMoFutx
6EIurvMIDHERUYNgc20nmoT4BaiUDPIjIiJqIGxu7FSTED+NzoCCUjY3REREDYHNjZ1qEuKnkIrhPWTWDRERUUNgc
20nmoT45ahLGERHRETUQnjc2MlmiJ9Bj/gIPwb5ERERNRDeCu4AZiF+JWXwcrsT4gcB0pkMoWxsiIiIGgybGwewln
0z6KFohLGxISIaIa8LWwN6nJuXtL2Blfzip1UGRERUFNupYm3MTExEILEVaaLRCIoLUpERERg/PjxGDBggN0Fujp
b0TcFpboGroiIiKh5q90Rm/vvvx8XL16Eh4ChBgwYgP79+8PT0xN//PEHevbsiaysLAWaNAhffWVo+t10TZzbphv
Q0RE1KDqd0QmNzcXL7zwAL577TWz6W+88QYUx76MXbt2Yf78+Xj99dcxcuRihxTqqmzm3DDfhoiIqEHV6cjNZ599h
jFjxLSZ/sQTT+Czz4DAIwZMbnzp2zr7pGwFb0jZeS12wTERE1pDo1N0qlEocPH64y/fDhw1AqlQAAG8EAhUJhX3
WNgK2cm9Yt3Z1UGRERUFNup8MK06dPx+TjK3H8+HH07NkTIpEIP//8M9auXYu5c+cCAL7//nvExMQ4tFhXZZZU1o
GL6UMXkopGxsiIiInEAmCINRlWu8++Q0rVqwwnXrq0KEDpk+fjieffBIAUFJSYrp7ypWo1Wp4e3sjPz8fKpKXYeu9
mleMglId1CVL8HaTWPNDRERKcPU5v07zs1NY1UfzU21IX6+Hg7ZBHERUXNWm89vu6521Wq1yMnJgcFgMJseGhpqz
2obFVshfotHd+ERHCiioGZUp+bm/PnmZdhXypWLigVBgEgkgL6vd0hxjQFD/IiIiFxlNzqb8ePHQyqV4ptvvkFQUJ
DFt0LmgiF+RERERqV0zc3Jkydx/Phxd0zY0dH1ND0M8SMiInItDcq56dSpE3JzcxlD56PEED8iIiLXUqfmZsmSJXj
ppZewf/9+3Lx5E2q12uzRnDDEj4iIyLXU6VZwsbi8J6p8rU1tLyhetWoVvq1ahUuXLgEAoqKiMG/ePAwd0tTqMqmp
qZg5cyZs/+fVXBACH46WXXsLkyZNRXHTD5Nyo3BjiI0RE5Ej1fid4vn376LRYZalbt8bixYsREREBAFi/fj1GjhyJE
yd0ICQqsr4jIwMDBs2DJMmTcLgJrtX6NAHTJkyBf7+/hg9eRdaQ0L5ueG5DpcL8fPx8Chbb7+NZ599tsq82b
NnY/v27UhpTzDnMzx5MK6d0W0tLQard/RR26u5hVjdspj7eDJ204MueGiIjIAerlyM3p06fRuXNniMVnD59utq
xXbp0qelqTfR6PT7//HMUFruHLi704pi0tDQMhJzYbNqQIUUPw0UcfoaysDDJZ1TuTNBoNNBqN6bmjrwLizg0REZFr
qXFz061bN2RnZyMgIADdunWDS CSCpYM+tQ3x03PmD0Li4lBaWgpPT09s27YNnTp1sjg20zsbGyGBZtMCAw0h0+mQm
5uLoKCgKsskJSVh4cKFNa6ntphzQ0RE5Fpq3NxxZGTA39/f9L0jd0jQASdPnsTt27ErkpKCcePGITU11WqDY+kiZk
vTjebMmY0ZM2eanqvVaoSEhDioeubcEBERuZoaNzdhYWGmny9fvox7770XUqn54jqdDocPHzYba4tcljddUBwbG4u
jR4/ivffewwcfFbLbKtWrZCdnW02LScnB1KpFL6+lRnmFAoFFApFjeupLWP0zUER19ww54aIiKhH1SnnZsCAAbh1
6laV6fn5+RgwYIBdBQmCYHaNTEVxcXHYvXu32BRdu3YhNjbW4vU2DYE5N0RERK6lTocVjHk2ld28eRMehjW/9Xnu3
LkY0nQoQkJCUBBQgC1btmD//v3YUxMngPJTSteuXc0GDRsAlN8ZtWLFcsyc0R0TJk1CWloaPvroI2zevLkuu+EWYb
4eWdy6C3NuiIiIEXCtmpuHH34YQpN1LePhJzc73aPX63H69Gnce++9NV7fjRs38PTTYMrKwve3t7o0qULdu7cifv
uuw8AkJWVhStXrpjGh4eHY8e0HXj++eexcuVKBAChY9myZU7NuAGYc0NER0RKapVzM2HCBADLYXuPPfY3NzcTPPk
cjnatGmDSZMmwC/Pz/GV0ghzboiIiBqfeksoTk50BgC0adMGs2bNqtUpqKaK0TdERESupU7X3MyfP9/RdTRazLkhI
iJyLXW+T/mLl77AZ599hitXrkCr1ZrN++WXX+wurLFgzg0REZFrqd0t4MuWLC0ECRMQEBCAEyd04J577oGvry8uXr
xY7Td6N0XGnBtLmHNDRETU80rU3Lz//vtYs2YNVqxYablcpdeegm7d+/GP/7xD+Tn5zu6RpfGnBsiIiLXUqdvBXD
3d0d6ejrCwsIQEBCA3bt3o2vXrjh//jx69+6NmzctX2DrChx9t5TR1bxiFJTqUFBaBi8lc26iIiGcqTaf33U6ct0q
VStTAXMwFoYjR44AKP/OqTr0Sk2KcfcG4D8Ym31g4mIimjh6nRByMCBA/H111+je/fuePBZ7/H888/jiy++wLfjx
0xBf82JtRC/N0ZFQ6vVw7+FwzVLExERKSPV6bSUWwCAWwAxfH599hoMHDyIiIgeIPPfSQ079129Ea0sQv6aFogN
xk8HaX270tIiKi5qreT0uJxWKzbwR/7LHHMHfuxJw/fx7t27evvyobLVshfoVaPXILeXqKiIiiodSqubl9+zbGjh0
Lf39/0/c6GQwGzJs3D+3atcORI0fw8ccf1letLslmiF9JGYP8iIiIGLcTrrmZ03cuDhw4gHHjxmHnzp14/vnnsXPn
TpSwlmlHjh3o169ffdxpsmyG+LnJIJfU6QAZERER1UGtPnw//fZBJCcn45133sH27dshCALat2+PvXv3NsvGBRAd4
ucpl8DPk9fbEBERNZRaNTfXr19Hp06dAABt27aFuqnE3/72t3oprLGwFeKnIh5MTEREVEDqtVpKYPBAJnsr9MwEo

mE3ww0IMzXA4tHd0FBqQ7qkjKo3GTwlEt4lxQREZET1Kq5EQQB48ePh0KhAACUlPzi8uTJVRqcrVu30q7CRsBazs2
ih6LZ3BARETWwWjU348aNM3v+1FNPObSYxuhqXnGVxgYovw38lWlnsHh0F34NAxERUQ0qVX0TnJxcX3U0WrZybgpK
dQ1cERERUFpGe5TtZDPnhhk3REREDYrNjZls5twoq59PREREjsXmxk62cm68lHX6bLIiIKqIzY3drKVc80LIYmIi
BoWdys4QMwcm4LSMngpZfBSStnYEBER0QGP3DiYIAAiZxdBRETUjPHIjQNUF+IX5ssEZYiioobEIzd2shXidzWv2E
mVERERNU9sbuzEED8iIiLXwubGTgzxIyIicilsbuzEED8iIiLXwubGTgzxIyIicilsbuzEED8iIiLX4tTDCKlJSdi
6dSv0nj0LNzc33HvvvViyZAK6d0hgZn9+/djwIABVaAnp6ejY8e09VmuVRVD/NQLZVC5McSPiIjIWZza3KSmpmLq
1Kno2bMndDodXnnlFQwePBii//fYbPDyqz4c5d+4cVCqV6bm/v399l2sVc26IiIhch10bm507d5o9T050RKBAAI4fP
46+fftWu2xAQABatGhRj9XVjK2cm8Wju/AIDHERUQNYqWtu8vPzAQA+Pj42x8bEXAoKAiJiYnYt2+f1XEajQZqtd
rs4UjMuSEiInItLtPcCIKAmTnnIiEhAZ07d7Y6LigoCGvWREfKSgq2bt2KDh06IDEXEQc0HLA4PikpCd7e3qZHSEi
IQ+tmzg0REZFrEQmCIDi7CACyOnUqv32Wxw8eBCTw7eu1bIjRoyASCTC9u3bq8zTaDTQaDSm52q1GiEhIcjPzze7
Zqeu0rPUGPrej1bnfzejD+40sn87REREZzlarYa3t3eNPr9d4sjN90nTsX37duzbt6/WjQ0A907dG+fPn7c4T6FQQ
KVSmT0ciTk3RERERsWpZy0gCJg2bRq2bt2KvXv3Ijw8vE7r0XHiBIKCGhxcXc0w54aIiMi10PwwtSpU7Fp0yZ89d
VX8PLyQnZ2NgDA29sbmm5uAIA5c+bg2rVr2LBhAwBg6dKlaN0mDaKioqDVarFx40akpKqGJSXFaftrMeemoKQMXsy
5ISIichqnNjerVq0CAPTV399senJyMsaPHw8AyMrKwPurV0zztFotZs2ahWvXrsHNzQ1RUVH49ttvMWzYsIYquwrm
3BAREbk0l7mguKHU50KkmriaV4zZKact3g6eEOHLnBsiIiIHaHQXFDdmzLkhIiJyLWxu7MSCyIiItfC5sZOKjdZt
f09LNXPJYiIIsdic2Mn5twQERG5FjY3dmL0DRERKwvhYQUHMMu5KS2DL5I5N0RERM7Cizc0JgiAyNlFEBERNWM8cu
MADPEjIiJyHTxyY6erecVVGhugP0PmlW1ncDWv2EmVERERNU9sbuzEED8iIiLXwubGTgzxIyIicilsbuzEED8iIiL
XwubGTgzxIyIicilsbuzEED8iIiLXwsMKDLAxxE9dUgaVG0P8iIiInIXNjQMw54aIiMh18LSunZhZ00RE5FrY3NiJ
0TdERESuhc2NnZhZ00RE5FrY3NiJ0TdERESuhc2NnZhZ00RE5FrY3NiJ0TdERESuhYcVHKBizk1BaRm8lMy5ISIic
hYeuXEWQBEzi6CiIioGe0RGwdgiB8REZhr4JEb0zHEj4iIyLWwubETQ/yIiIhcC5sb0zHEj4iIyLWwubETQ/yIiI
hcC5sb0zHEj4iIyLWwubETQ/yIiIhcil0bm6SKJPTs2RNeXl4ICAjAqFGjc07c0ZvLpaamokePHLaqlWjbt1lWr17
dANVaZwzx+25GH3z69974bkYfLB7dhbeBEXEROYFTz5mkpqZi6tSp6NmzJ3Q6HV555RUMHjwYv/32Gzw8LDcGGRKZ
GDZsGCZNmoSNGzfi0KFDMDJLCvz9/TF690gG3oNyzLkhIiJyHSJBEARnF2H0559/IiAgAKmpqejb6/FMBnNz8b27
duRnp5umjZ58mSc0nUKaWlpNrehVqvh7e2N/Px8qFQqu2u+mleM2SmmLd40nhDhi8Wju/DUFBERKZlq8/ntUtfc50
fnAwB8fHysjklL58PgWYPNpg0ZMgTHjh1DWVnV2641Gg3UarXZw5GYc0NERORaXKa5EQQBM2f0REJCAjp37mx1XHZ
2NgIDA82mBQYGQqfTITc3t8r4pKQkeHt7mx4hISE0rZs5N0RERK7FZZqbad0m4fTp09i8ebPNsSKR+VdTGs+sVZ40
AHPmzEF+fr7pkZmZ6ZiC72D0DRERKwtxiRCW6d0nY/v27Thw4ABat25d7dhWrVoh0zvbbFp0Tg6kUil8favmzSgUC
igUCofWW5Ex5+aglwumHNDRETUsJx65EYQBEybNg1bt27F3r17ER4ebn0ZuLg47N6922zarL27EBSbC5ms4Y+SM0
eGiIjItTj1lbqkpU6Zg06ZN+Oqrr9ChQwfTdG9vb7i5uQEOp6107do1bNiW AUD5reCd03fGc889h0mTJiEtLQ2TJ0/
G5s2ba3QruKpVljK6mleMglIdCkrK40Umg5dSysaGiIjIQwrz+e3UcyarVq0CAPTV399senJyMsaPHw8AyMrKwPur
V0zzsPDsWPHDjz//PNYuxILg0oDSwZMZqdL3ADMuSEiInIlLpVz0xCyC0NERNT4NNqcm8aI0TdERESuhc2NnZhZQ
0RE5FrY3NiJ0TdERESuhc2NnYw5N5Yw54aIiKjhsbmxE3NuiIiIXASPKzhAmK8HFo/uUp5aI0GLyVzboiIiJyFR2
4cTBCAqt9wRURERA2FR24cngCF+RERERONHbux0Na+4SmMDLgfcvLlTDK7mFTupMiIiouaJzY2dG0JHRETkwjt2Ik
hfkRERK6FzY2dG0JHRETkwjt2IkfhfkRERK6FzY2dG0JHRETkwHnYwQHMqvXkyuDlxhA/IiIiZ2Fz4wDMuSEiInId
PC1lJ+bcEBERuRY2N3Zizg0REZFrYXNjJ+bcEBERuRY2N3Zizg0REZFrYXNjJ+bcEBERuRY2N3Zizg0REZFr4WEFB
zDLuSktg5eS0TdERETOWiM3DiK6819BKP9ZVNlgIiIiqjc8cuMADPEjIiJyHTxyY6drNkL8rjHEj4iIQEGxubGT2k
aIn5ohfkrERA2KzY2dG0JHRETkwjt2IkfhfkRERK6FzY2dVDZC/FQM8SMiImpQbG7sdJeNEL+7mHVDRETUoJx6WOH
AgQN4++23cfz4cWRLZWHbtm0YNWqU1fH79+/HgAEDqkxPT09Hx44d67HS6LUM8VOXLEHLxhA/IiIiZ3Fqc1NUVISu
XbtiwoQJGD16dI2X03fuHFQqlm5v79/fZRXy8y5ISIich10bW6GDh2KoU0H1nq5gIAAtGjRwvEF1ch12yXV5ty89
UhXBLdwc1J1REREZU+jv0YmJiYGQUFBSEmXl59+6odq9FooFarzR60LF9SVm30Tb6NW8WJiIjIsRpVcxMUFIQ1a9
YgJSUFW7duRYc0HZCYmIgDBw5YXSYpK0ne3t6mR0hIiENrYs4NERGRa2LU9yl36NABHTp0MD2Pi4tDZmYm3nnnHfT
t29fiMnPMzMHMmTNNz9VqtUMBH0bcEBERuZZGdeTGkt69e+P8+fNW5ysUCqhUKr0HI3m7yarNufG20fwQERGRYzX6
5ubEiRMICgpy2vaDW7hVm3PDi4mJiIgalNPSxUWfULChQum5xkZGTh58iR8fHwQGhqK0XPm4Nq1a9iwYQMAYOnSp
WjTpg2ioqKg1WqxcENGpKSKICuLxVm7AMA856agpAxezLkhIiJyGqc2N8e0HTML5TNeGzNu3DisW7c0WVLZuHLlim
m+VqvFrFmzc03aNBi5uSEqGrffvsthg0bluCl1V8ScGyIiItchEgRBcHYRDUMtVsPb2xv5+fK0uf7m+u0SvPjFKYu
3gydE+DLnhoiIyAFq8/nd6K+5cTbm3BAREbkWnj2Ys4NERGRa2FzYyfm3BAREbkWnj2Ys4NERGRa2FzYyfm3BAR
EbmWRvX1C64qzNCdb35FfklZ5goLYOXUGZVnXkbGyIiIdgc+Mgw53c2MwQERG5AJ6WiIiioiafQ0REREiKwXui
IiIqElhc0NERERNCPsbiIiialLY3BAREVGTWuaGiIiImhTm3DhIfrEWUyVaqEvLoHKTcw9DDm93ubPLREIiianbY3D
jA9dslmJ1yGj+ezzVN6xvph8WjuzDYj4iIqIHxtJSd8ou1VRobADhwPhcvp5xGfRWSZURERE1T2xu7JRBqK3S2Bg
d0J+L3EI2N0RERA2JzY2d1KVl1c4vsDGfiIiIHvNjZ1USlm1871szCciIiLHYnNjJz9P0fpg+lmc1zfSD36evGOK
iIioIbG5sZ03uxylR3ep0u0DjftDktFdeDs4ERFRA+0t4A4Q3MINy8fEILdQi4LSMngpZfdzZM4NERGRM7C5CRBvd
zYzRERERoCnpYiIiKhJYXNDRERETQqbGyIiImpS2NwQERFRk8LmhoiIiJoUNjDERETUpLC5ISIioibFqc3NgQMhMG
LECAQHBMkEuHLL7+0uUxqaip690gBpVKJtm3bYvXq1fVfaA1czStGepYaP128ibNZalzNK3Z2SURERM2SU0P8ioq
K0LVrV0yYMAGjR4+20T4jIwPDhg3DpEmTSHHjRhw6dAhTpkYBv79/jZavL5dvFmHutjM4d0GmaVpChC8WPRSNMF8P
p9VFRETUHIkEQRCcXQQAiEQibNu2DaNgjbi6Zvbs2di+fTvS09NN0yZPnoxTp04hLS2tRttRq9Xw9vZGfn4+VCqVv
WXjaL4xZqecNmtsJBIiFLf4dBe0bulu93aIiIias9p8fjeqa27S0tIwePBgs2lDhgZBsWPHUFZWZnEZjUYDtVpt9n
CkgLkDxcYGAA5euImCUplDt0dERETVa1TNTXZ2NgIDA82mBQYGQqfTITc31+IySULJ8Pb2Nj1CQkIcWp06xHJTZR
QWv18IiIicqxGldwA5aevKjKeVas83Wj0nDnIz883PTIzMXlaj8pNVu18L2X184mIiMixGtW3grdq1QrZ2dlm03Jy
ciCVSuHr62txGYVCAYVCUW8leSmlSIjwxUER19x4KRvVr5iIiKjRa1RHbuLi4rB7926zabt27UJsbCxmuccIWnd0
h2LHopGQoR5c2W8W40EXEMRETUspx5WKcwsxIULF0zPMzIycPLkSfj4+CA0NBRz5szBtWvXsGHDBgDld0atWLECM2
f0xKRJk5CWloaPPvoImzdvdTuuAADCFD2weHQXFJTqUFbaBi+LDF5KKRsbIiIiJ3Bqc3Ps2DEMGDDA9HmzmJkAgHH
jxmHdunXIysrCLStXTPPDW80xY8c0PP/88115ciWCg40xbNkyp2bcGLGRISIicg0uk3PTUBdydC0NERET1r8nm3BAR
ERH2wuaGiIiImhQ2N0DERNSksLkhIiKiJoXNDRERETUpbG6IiIoSWFzQ0RERE0KmxsiIiJqUtjCEBERUZPS7L6y2
hjIrFarnVwJERER1ZTxc7smX6zQ7Jqbg0ICAEBISiITkyEiIqLakigogLe3d7Vjmt13SxkMBly/fh1eXl4QiUQ0Xb
darUZISAgymZ0b9PdWNYf9ba77CHA/m5LmsI8A97Mpqe0+CoKAgOICBAChQyyu/qqaZnfkRiwWo3Xr1vW6DZVK1WT
/Z6yo0exnc9hHgPvZLDSHFQ54n01JbfbR1hEbI15QTERERE0KmxsiIiJqUtjC0JBCocD8+f0hUCicXUq9ag772Rz2
EeB+NiXNYR8B7mdTup/720wuKCYiIqKmjUduiIiIqElhc0NERERNCPsbiIiialLY3BAREVGTWubGQd5//32Eh4dDq

VSir48e+PHHH51dksMd0HAAI0aMQHBwMEQIEb788ktnl+RwSULJ6NmzJ7y8vBAQEIBRo0bh3Llzzil7L4VatWoUuXb
qYwrPi4uLw3Xff0busepWULASRSIR//v0fzi7FoRYSwACRSGT2aNWqlbPLqhfxRl3DU089BV9fX7i7u6Nbt244fvy
4s8tymDZt2lR5LUUIEaZOners0hxKp9PhlVdFRXh40Nzc3NC2bVv861//gsFgcNg22Nw4wKeffop//v0fe0WV3Di
xAn06dMHQ4c0xZUrV5xdmkMVFWRWha9euWLFihbNLqTepqamY0nUqjhw5gt27d00n02Hw4MEoKipydmk01bplayxev
Bjhjh3DsWPHMHDgQIwcORK//vqrs0urF0ePhsWaNwVqUsXZ5dSL6KiopCVlWV6nDlzxtkl0VxeXh7i4+Mhk8nw3X
ff4bffffs0///lvtGjRwtm0czRo0fNXsfdu3cDAB599FenV+ZYS5YswerVq7FixQqkp6fjrbfewttvv43ly5c7biM
C2e2ee+4RJk+ebDatY8e0wssvv+ykiuofAGHbtm30LqPe5eTkCACE1NRU25dS7lq2bCmsXbvW2WU4XEFBgRAZGSns
3rlb6NevnzBjxgnl+RQ8+fPF7p27ersMur7NmzhYSEBGeX0aBmzJghtGvXTjAYDM4uxaGGDx8uTJw40Wzaww8/L
Dz1lFM02waP3NhJq9Xi+PHjGDx4sNn0wYMH4/Dhw06qihwlpZ8fA0Dj4+PkSuqPXq/Hli1bUFRuHli40GeX43BTp0
7F80HDMWjQIGeXUm/Onz+P40BgHieH44knnsDFixedXZLDbd++HbGxsXj00UcREBCAmJgYfPjh84uq95otVps3Lg
REyd0dPiXPdtbQkICfvjhb/z+++8AgF0nTuHgwMYNmyYw7bR7L4409Fyc30h1+sRGBhoNj0wMBDZ2dL0qoocQRAE
zJw5EwkJCejcub0zy3G4M2f0IC4uDqWlpfD09MS2bdvQqVMNz5f1UFu2bMEvv/yCo0eP0ruUet0rVy9s2LAB7du3x
40bN/DGG2/g3nnvxa+//gpfx19nl+cwFy9exKpVqzBz5kzMnTsXP//8M/7xj39AoVDgmWeecXZ5Dvfl1/i9u3bGD
9+vLNLcbjZs2cjPz8fHT2hEQigV6vx6JFizBmzBiHbYPNjYNU7qwFQWhy3XZzM23aNJw+fRoHDx50dinlokOHDjh
58iRu376NLJQUjBs3DqmpqU2mwcnMzMSMGTOwa9cuKJKVZ5dTb4Y0HWR60To6GnFxcWjXrh3Wr1+PmTNn0rEyxzIY
DIiNjcWbb74JAIiJicGvv/6KVatWncnm5qOPPSLQoUMRHBzs7Fic7tNPP8XGjRuxadMmREVf4eTJk/jnP/+J40Bgj
Bs3ziHbYHNjZ8/P0gkkipHaXJycqoczaHGy/r06di+FTs0HDIAlq1b07uceiGXyEREQEAI2NxdGjR/Hee+/hgw
8+cHJlJnH8+HHk50SgR48epml6vR4HDhZaHihUroNfoIJfInFhh/fDw8EB0dDT0nz/v7FicKigoqErjffdddyMLJcV
JFdWfy5cvY8+ePdi6dauzS6kXL774Il5++WU88cQTAMqb8suXlyMpKclhzQ2vubGTXC5Hjx49TfeLg+3evRv33nuv
k6qiuHIEAd0mTcPwRvuxd+9ehIeH07ukBiMIAjQajbPLcJjExESc0XMGJ0+eND1iY2MxduxYnDx5skk2NgCg0WiQn
p60oKagZ5fiUPHx8VViGX7//XeEhYU5qaL6k5ycjICAAAwfPtZpZSL4uJiiMxm7YdEInHoreA8cuMAM2f0xNNPP4
3Y2FjExcVhzZoluhLLCiZPnuzs0hyqsLAQFy5cMD3PyMjAyZmN4ePjg9DQUcdW5jhTp07Fpk2b8NVXX8Hly8t0RM7
b2xtubm50rs5x5s6di6FDhyIkJAQFBQXYsmUL9u/fj507dzq7NIfx8vKqcq2U4chfH19m9Q1VLNmzcKIESMQGHqK
nJwcvPHGG1Cr1Q77F7CreP7553HvvffizTffxG0PPYaff/4Za9aswZola5xdmkMZDAYkJydj3LhxkEqb5kf0iBEjs
GjRIoSghIqKgonTpzAu+++i4kTJzpuIw6776qZw7lypRAWfibi5XKhe/fuTfLW4X379gkAqjzGjRvn7NIcxtL+AR
CSk50dXZpDTZw40ft/q7+/v5CYmCjs2rXL2WxVu6Z4K/jjjz8uBAUFCTKZTAgoDhYefvhh4ddff3V2WfXi66+/Fjp
37iwoFAqhY8e0wpol5xdksN9//33AgDh3Llzzil6l3qjVamHGjBlCaGiooFQqhbZt2wqvvpKKoNfoHLYNkSAIguNa
JSIiIiLn4ju3RERE1KSswSEiIqImhc0NERERNSlsboiIiKhJYXNDRERETQqbGyIiImpS2NwQERFRk8Lmhogc4tKLS
xCJRDh58qSzSze5e/YsevfudAVSiw7dujm1ljZt2mDp0qV0rYGovh04cAAjRoxACHAwRCIRvzyy1otv2DBAohEoi
oPDw+PWq2HzQ1REzF+/HiIRCIsXrzYbPqXX37ZbL+hfv78+fDw8MC5c+fww8/WBxj/L2JRCJIPVKEhobi//7v/5C
Xl+fQwo4ePYq///3vDl0nkaspKipC165dsULFIjotP2vWLGRlZLZk90nXqhEcffBRW62FzQ9SEKJVKLFmYx0EfzM6k
LWrrw0ff/yBhIqVWfudfX1+q4+++H1LZwbh06RLwL2Lr7/+GL0mTKnzdi3x9/eHu7Q9Dj5GqGdy8B2KN954A
w8//LDF+VqtFi+99BLuusuueHh4oFevXti/f79pvqenJlqlamV63LhxA7/99hueffBzWtXB5oaoCrk0aBBatWqFpK
Qkq2MWLFhQ5RTN0qVL0aZNG9Pz8ePHY9SoUXjzzTcRGBiFiLaY0HChdDpdHjxxRfh4+0D1qlb4+0PP66y/rNnz+L
ee++FUqlEVFSU2R8uAPjtt98wbNgweHp6IjAwEE8//Tryc3NN8/v3749p06Zh5syZ8PPzw333WdxPwwGA/71r3+h
devWUCgU6Natm9Kxf4pEihw/fhz/+te/IBKJsGDBAqU/E4VCgVatWqF169YYPHgwHn/8cezatctsTHJyMu6++24ol
Up07NgR77//vmleXfWcXn75ZbPxf/75J2QyGfbt2weg6mmp/Px8/P3vf0dAQABUKhUGDhyIU6d0meZJJBICP34cQP
k3tvv4+KBnz56m5Tdv3mz65m+tvotP06YhKCGISqUSbdq0qfb/ASJnmTBhAg4d0oQtW7bg90nTePTRR3H//ffj/Pn
zFsevXbsW7du3R58+fWq1HTY3RE2IRCLBm2++ieXLl+Pqlat2rWvv3r24fv06Dhw4gHffRcLfizAAw88gJYtW+Kn
n37C5MmTMXnyZGRmZpot9+KLL+KFF17AiRMnc0+99+LBBx/EzZs3AQBZWVno168funXrhmpHjmHnzp24ceMGHnvsM
bN1rF+/HLKpFiC0HcIHH3xgsb733nsP//73v/H00+/g90nTGDJkCB588EHTH8msrCxERUXhhRdeQFZWfmbNmLWj/b
548SJ27twJmUxmmbbhx/ilVdewaJFi5Ceno4333wTr732GtavXw8AGDt2LDZv3oyKX9X36aefIjAwEP369auyDUE
QMhz4cGRnZ2PHjh04fvw4unfvjsTERNy6Dve3t7o1q2bqTE8ffq06b9qtRoAsH//ft06ly1bhu3bt+0zzz7DuXPn
sHHjRrNmLcgV/PHHH9i8eTM+//xz90nTB+3atc0sWb0QkJCA50TkKuM1Gg0++eSTWh+1AcBvBSdqKsaNGyeMHDlSE
ARB6N27tzBx4kRBEARh27ZtQsW3+vz584WuXbuaLfu//xHCASLM1tXWFiYoNfrTdM6d0gg90nTx/Rcp9MJHh4ewu
bNmWBEISMjAwBgLB48WLTmLKyMqF169bCkiVLBEEQHndee00YPHiw2bYzMzPNvgW5X79+Qrdu3Wzub3BwsLBo0SK
ZaT179hSmTliet61aldh/vz5la5n3LhxgkQIEtW8PASLUmn6Jvh3333XNCYkJETyGT2XKvV/66EBcXJwiC10Tk
5AhSqVQ4c0CAaXiet61aldh/vz5la5n3LhxgkQIEtW8PASLUmn6Jvh3333XNCYkJETyGT2XKvV/66EBcXJwiC10Tk
EFYunSp8Mgjwjwdu3Cv32W0EQBKF9+/bCqLwRBEeQh0nTpwsDBw4UDAZDtftK1JAACNu2bTM9/+yzzwAQgoeHh9
LDKpUKjz32WJXLN23aJEiLuiErK6vW25ba0URkwtasmQJBg4ciBdeeKH064iKioJY/NfB3cDAQHTu3Nn0XCKRwNf
XFzk50WbLxcXFmX6WsqWIjY1Feno6A0D48ePYt28fPD09q2zvzjz/+QPv27QEAsbGx1damVqtx/fp1xMfHm02Pj483
ndqpjQEDBmDVqlUoLi7G2rVr8fvvv2P690kAyk8vZWm4tlnn8WkSZNMyy+h00nh7ewMov57mvvvuyeffII+ffogI
yMDaWlpWLvqlcXtHT9+HIWFhVWuAyopKcEff/wBoPz03EcffQSDwYDU1FQkjiYiNDQUqamp6N69037//XfTkZvx48
fjvvvuQ4c0HXD//ffjgQcewODBg2v9eyCqTwaDwXS6VSKRM2z9Ddh7dq1e0CBB9CqVatab4vNDVET1LdvXwwZMgR
z587F+PHjzeaJxWKz0ycAUFZWVudFU/LA0XXsFiaZjAYbNZjvFvLYDBGxIgrWLJkSZUxxutHANT4ts/Kd4EJglCn
08M8PDwQEREBOPwUz4ABA7Bw4UK8/vrrpv378MMP0atXL7PLKv6BHjt2LGbMmIHly5dj06ZNIqKQteuXS1uz2AwI
CgoqMr1SADQokULA0WvYUFBAx755Rf8+00PeP311xESEoI333wT3bp1Q0BAA06++24AQPfu3ZGRkYHvvvs0e/bswW
0PPYZBgwbhiy++qPXvgqi+xMTEQK/XIycnx+Y1NBkZGdi3bx+2b99ep22xuSFqohYvXoxu3bqZjoYY+fv7Izs726w
RcGQ2zZEjR9C3b18A5Uc3jh8/jmnTpgEo/xB0SULbmZtIjXW/c+PSqVCcHawDh48aNoWABw+fBj33HOPfTuA8lvI
hw4div/7v/9DcHaw7rrrLly8eBFjx461usyoUaPw3HPPYef0ndi0aR0efvppq207d++070xsSKVSq9fGGK+7WbFiB
UQIEtp16oTg4GC0HEC33zzTZVrevQFR5//HE8/vjje0SRR3D//ffj1qlb8PHxqdPvgKguCgsLceHCBdPzjIwMnD
x5Ej4+Pmjfvj3Gjh2LZ555Bv/+978REX0D3Nxc7N27F9HR0Rg2bJhpuY8//hhBQUEY0nRonergBjGETVR0dDTGjh2
L5cuXm03v378//vzzT7z11lv4448/sHLlSnz33Xc02+7KLSuxbds2nd17FL0nTkVeXh4mTpWIAJg6dSpu3bqFMPWG
40eff8bFixexa9cuTJw4EXq9vlbbefHFF7FkyRJ8+umn0HfuHF5++WwCPhKSM2bMsHsf+vfvj6ioKLz55psAyu8wS
0pKwnvvvYfff/8dZ86cQXJyMt59913TMh4eHhg5ciRee+01pKen48knn7S6/kGDBiEuLg6jRo3C999/j0uXLuHw4c
N49dVXcezYMB6Nm7ciH79+kEkEqFly5bo1KkTPv30U/Tv39807j//+Q+2bNmCs2fP4vfff8fnn3+0VqlamY4CETW
UY8e0ISYmBjExMQCAmTNnIiYmBvPmzQNQftfhM888gxdeeAEd0nTagw8+iJ9++gkhISGmdRgMBqxbtw7jx4+vccvq

[illegible]

8v1qlTR/b9EBFR4XD1EBEReb11enp6mDNnDk6fPq3xaM2b6NSpk+xzvXr1IAgC2rdvL/Xp60jAxsYmzzem+fr6yh5
5sbKyQsuWLXHgwAEAwPxR13H58mX06dMHAJCDnS21Dh06IDk5GVeuXJHN6eXLVajcf/31V9SvX19jA+GAGACIovHG
q6x+/vln60rqQldXF7Vq1UJ0dDRGjx6N0XPmAAAPXqEwMBA2NjYQEdHBzo60LAqlcjIyMCL5SfynffKLsu4e/duv
vetMG7duoUDBw7gs88+g4mJCQCgZ8+eMDIyyvPRMgDS/c/Vq1cv60joSN9TLgCHB419Rxx9fZGeno6zZ88CAJo1a4
aEhASMGECE/bsQXp6eqHyfnm+0vqbKarifs+5jh49igcPHSdF3192Hc+fp4enpyd0nTqFjIwMZGRk4PTp0+jWrRv
09PSk45VKpcYqp9y/64CAAF/z549YWhoqLEaQFGjRrC1tZX1aWlpYdSoUYiJicHt27cBADdu3MDu3bsxYsSIN97j
i4ioPGJxiIiIiN4Jb29vfPTRR5gyZYrG40DFZwpqKvusp6eHCHuQqF9fX6P/6d0nGsebm5vn2Xf//n0AL14ZdGATJ
06Uii25bcSIEQCg8RhWYR/5un//fp6x1apV8aLq3Xr1jh16hR0nz6NxmREpKamYtmyZdIPd19fX3z99dcYNGGQ9u
zZg5MnT+LUqV0oXLkynjx5UmD0QP73rTDCw8MhiiJ690iB1NRUpKamIisrC126dMFvv/2Gy5cvv3ZuHR0dmJmZady
jgvLKjQ0KCSLixYtx/PhxtG/fHmZmZmjXrh10nz5dqPxL82+mZs2auHfvHjIyMgoVX9zv0VfutfTo0UPjWhYsWABR
FPHgwQM8fPgQoiiaatWqGn082nf//n3o60hIjzjmEgRBdh9z5XdvBgwYAAMDA6xatQrAi0fiDAwMMGDAgNdeFxEra
eLbyoiIi0idEAQBCXysgLu707777juN8dyCzqt7jrxJkeR1ULJS8uwzZmMDAFSqvAnAi4LCZ599lucdnZ2ss+FXb
VgZmaG50Rkjf67d+/KzL0cKpUKTZO0yXMSLS0NMTExmD590r744gupPzMzEw8ePHhtzkD+9+11nj9/Lu25k9/9DA8
P19hAPCULBdWrV5c+Z2dn4/79+1I+BewQ25cbq60jg/Hjx2P8+PFITU1FbGwsgo0D4eHhgTt37qBChQoFXkNp/s14
eHhg79692LVrF7y9vQuMfZPv0VfutfSxfvjzft9ZVrVoVWVLZEARBKia97NX7ZWzhuzsbNy7d09WIBJFESkpKWjat
KksPr97o1Kp40/vj9WrV2PxiImIiIiAr6+vtBqNiIiKhiuHiIiI6J1xc30Du7s7Zs2apbH5cNWqVaGvr4/ff/9d1r
9jx463ls/GjRtlbz6448/cPT0UbRt2xbAix/xdevWUJJCapo0aZJnMzIyKta527Vrh8TER0lxlpr166FIAhwdXU
t9nUVRBAEiKIIhUIH61+9ejVycnIKPNb0zg4WFhb53rfX2bNnD/7880+MHDkSBw4c0Gg0Dg5Yu3Ytsr0zZcetX79e
9jk60hrZ2dnS95Tr4sWLSHikPVt2LABRkZG+0ijjzTyMTExQY8ePTBy5Eg8ePCgUG+BK82/mYEDB8Lc3ByTJ0/GX
3/9LWdM7sbrRfmeC2NeXU3UqlUrmJiYIDExMd9r0dPTg6GhIZo0aYLT27fj2bNn0vGPHj1CTEYmBM527doBeLHR9c
u2bt2KjIwMabwwxowZg3///VdahZa7kTsRERUDVw4RERHR07VgwQJ8/PHH+0eff+Dg4CD1C4IAPz8/hIeHo06d0nB
0dMTJkyexYc0Gt5bLP//8g+7du2Pw4MFIS0vD90nToa+vj6CgICnm22+/Rfv27eHh4YGAgaBUR14dX48wKVL3D2
7Fls3ry5W0ceN24c1q5di44d02LWrfmwsrLCTz/9hBURVmD480Ea+6yUFGNjY7i4uGDRokWoVKKsRk2tcfDgQajV6
teuutDS0sLs2bMxaNag6b6lpqZixowZhXqsTK1WQ0dHB8HBwdLjcy8b0nQoxowZg59++glu3aV+rdt2wYdHR24u7
vj4sWL+PLLL+Ho6IhevXrJjq9WrRq6d0mCGTNmWMLCAuvWrc0+ffuYMECaUVQ586d0aBBARp0gSVK1fGH3/8gbc
wMFhZwFu3bqvYbS/JtRqVtYsWMH0nXqhMaNG2PUqFFo0aIF9PT0c03aNaXbtw4JCQn47LPPivQ9N2jQAADw3Xff
wcjICPr6+qhVqxbMzMywPly+Pv748GDB+jRoweqVKmCe/fuISEhAffu3cPKLSsBALNmZULHjh3h4eGBsWPHIicnB
4sWLYJSqZstVHJ3d4eHhwcAawORnp60Vq1a4ffff8f06dPRuHFj903bt9D3w9bWfP6envjll1/QuNvrjf2miIioCE
prJ2wiIiL6sL38trJX+fr6igBkbysTRVFMS0sTBw0aJFatWLU0NDQU03fuLCYLJeX7trJ79+7Jjvf39xcNDQ01zv
qm9Fy3zzlw8/iPGjBERV64sKhQK8X//+594+vRpjEmTEhLEXr16iVWqVBFldXVFc3Nz8ZNPPhFXrVpVq0vNzx9/
/CH6+vgKZmZmoq6urmhnZyCuWRieptVrk+rexlsX/+afo5eULVqxYUTQYmHi9PT3FCxcuiFZWvQk/v78U9+rb
nKtXr1arFu3rqinpyfa2tq4eHhor+/f4FvK7t3756op6cnduvWld+Yhw8figYGBtLbsXK/5zNzoidJ3cWLUqLaG
RkJP4r+Ih///13nte9Zcsw0cHBQdTT0x0tra3Fr776SHYXGhoqtmZUqUqZKop6cn1qxZUxw4cKCYLJRU4D0rK38
zoiiKKSkipYmBgo0jg4CBWqFBBVCgUoo2NjTh06FDx/PnzULxhv2dRFMwSDCxVq1aora2tsZbAw8ePch27NhRNDU1
FXV1dcXq1auLHTt2FDdv3iyb48cfxqBnmwo3df58+eLY8aMEStWrCiLe/LkiRgYGChawVmJurq6ooWFhTh8+Hdp7
XW5Cv03HBkZKQIQN23aVPgbSEREGRRfGldLBERERFRGTfjxgzMnDkT9+7de+0eTNbW1mjQoIHGY0wLJS4uDq6urt
i8eTN690jxVs7xocnKyoKtkx0qV6+0vXv3vpVzeHL54fjx40hKSoKuru5b0QcRUXnAx8qIiIiIi0iNDRw4E07u7rC
wsEBKSgpWrVqFS5cuYenSpSV6nszMtJw9exYnT57Ejz/+iK+++oqFISKiN8TiEBERERERvbH//vsPEyd0xL1796Cr
q4uPPvoIP//8M9zc3Er0PMnJyWjZsiWMjY0xd0hQjB49ukTnJyIqj/hYGRERERERERFR0cX2RMERERERERLWMSd
hERERERERERLWMSdHERERERERERLWpckJroLXn+/Dnu3r0LIyMjCIJQ2ukQERERERHRB04URfz333+oVq0atLQKvx
6IXSGit+Tu3buwtLQs7TSiIiIiIionLlZ5w5q1KhR6HgWh4jeEiMjIwAv/lMaGxuXcjZERERERET0oUtPT4e1paX
0e7SwWBwiektyHyXrtPanaCsMsjkbIiIiIiIiKqozi/qVdgrFUtStTbghNRERERERERFR0cbiEBERERERERFR0cbi
EBERERERERFR0cbiEBERERERERFR0cbiEJW6gIAACIKg0a5fvw4AmDdvHrS1tTF//nyNYyMjIyEIAurVq6cxFh0dD
UEYQg1tLYs3MTHJ9zMADBw4EA0bNsSzZ89k/T//DN0dXVx+vTp4l8sERERERERURnD4hCVCZ6enkh0Tpa1WrVqAQ
AiIiIwefJkhIeH53ms0aEh/vnnHxw7dkzWHx4ejpolaxY5l7CwMPz333+YpN261JeamoohQ4ZgypQpanKkSZHnJCI
iIiIiIqrWByiMkGhUMDc3FzwtLWlcfDgQtX58gSzs1CRkYGDh06pHGsj040fH19ZcWjP//8E3FxcFD19S1yLkZG
RojMjERoaChOnEtGbaPj8889yWGBqV0nFv8iYiIiIiMogFoeoTf0r1fdX8YGuri58fHygVqvzjBs4CCcioLw+
PFjAC8eR/PO9EDv7LWld62bdtixIgr8PF3x+BnmXedHY21a9dCR0cn32MyMz0Rnp4ua0RERERERERLHYtDVCbEXM
RAqVRKRwfPnkHPT8fWrVvh5+cHAPDz880WLvVylLo40TmhTp062LJLC0RRRGRKJAYMGPBG0YWEhEAQBHh7e2PevH1
57mv0arXKpZKapaXlG52fiIiIiIiI6F1gcYjKBFdXV8THx0tt2bJL2LBhA2rXrg1HR0cALwpAtWvXxqZnm/KcY8CA
AYiIiIMDbgwfx6NEjd0jQ4YlyMjAwWlQJE1ChQgWMHTv2tfBQUFIS0uT2p07d97o/ERERERERETvQv7PyBC9Q4aGh
rCxsZH1hYeH4+Lf17JHuZ4/fw61Wo0hQ4ZozNGnTx9MnjwZM2bMQL9+/Qp8BkywdHR0oK2tDUEQXhurUCigUcJe+J
xERERERERE7xKLQ1QmnT9/HqdPn0ZcXBxMTU2l/tUUVLi4u0DChQto0KCB7BhTU1N06dIF0dHRWLvq1bt0mYiIiI
Ii0i9x0IQLUlqtRrNmjWDi4uLxliLfi2gVquxZMKsJbHIyEisWLECZmZmht5XTk404uPjZX16enqoX79+kfMmIiI
IiIiet9wzyEqc549e4Z169bBy8srz3EvLy+sw7c0z5490xgzMDAoUmEIAB49e0TGjRvL2pvuV0RERERERET0vhBEU
RRL0wmiD1F6ejpUKhUcR6+CtsKgtNMhIiIiIiKiIjzqf9pp1Akub9D09LSYGxsX0jjuhKIiIiIiIiIiKgcY3GiI
iIiIiIiKgc44BURG/ZoTk+Rvr0R0RERERERPUceUQEREREREREVE5xuIQREREREREVE5xuIQREREREREVE5xj2
HiN4yl6kb+Sp7IiJ6771vr/IlIiKiWPKISiIiIiIiKiKcozFISiIiIiIiKiKcozFISiIiIiIiKiKcozFISiIiIi
IiKiKcozFISrTULJSMHbsWNjY2EBfXx9Vq1ZF69atsWrVKjx+/FgW02/ePGhra2P+/Pka80RGRKIQBNSrV09jLDO6G
oIgwNraWiP+laavr1/i10hERERERERUmvi2Miqzbt68iVatWsHEXATz5s1Dw4YnkZ2djatXryI8PBzVqlVDly5dpP
iIiAhMnjwZ4eHh+OKLLzTmMzQ0x0D//INjx46hRYSuW94eDhqlqypEW9sbIwrV67I+gRBKMErJCIiIiIiIip9LA5
RmTviXaA060jg90nTMDQ0LPobNmWILy8viKIo9R08eBBPnjzBrFmzshbtWhw6dAguLi6y+XR0d0Dr64vw8HCpOPTn
n38iLi4048aW8aNG2XxgiDA3Nz8LV4hERERERUenJY2VUJt2/fx979+7FyJEjZYWH728iketVsPhxwe6urwr8
fGBWq3085iBAwciKipKe1QtMjISnp6eqFq16hvnJmZifT0dFkjIiIiIiIiKutYHKIy6fr16xBFEXZ2drl+SpUqQa
LUQqlUIjAwEACQnp60rVu3ws/PDwDg5+eHLVu25FmccXJyQp06dbBlyxaIoojIyEgMGDAgzxS0tKkc+W2Tz/9NN+
cQ0JCoFKppGZpaVncyyiciIiIiIiJ6Z1gcojLt1T1+Tp48ifj4eDg40CAzMxMASGHDBtSuXRu0jo4AXhSAateujU2b
NuU554ABAXAREYGDBw/i0aNH6NChQ55xRkZGiI+Pl7WiIh8cw0KCKJaWprU7ty5U5xLJiIiIiIiInqnu0cQLUk2N

jYQBAGXL1+W9deuXRsaYGBgIPWFh4fj4sWL0NH5/z/n58+fQ61WY8iQIRpz9+nTB5MnT8aMGTPQr18/2XEv09LSgo
2NTaFzVigUUCghY4nTiIiIiIiKgu4cojKJDMz7i7u+Prr79GRkZGvnHnz5/H6d0nERcXJlvhc+jQIZw6dQoXLLz
Q0MbU1BRdunTBwYMH832kjIiIiIiIiKi84MohKrNwRfIBVqlaoUmTJpgxYwYaNwoEL50tnDp1CpcvX8bHH38MtVqN
Zs2aabyZDABatGgBtVqNJUuWaIXFRkZixYoVMDMzy/f8oigijSVFo79KLSrQ0mJdlYiIiIiIiD4MLA5RmVWnTh2c0
3c08+bNQ1BQEP78808oFarUr18fEyd0xJAhQ1C7dm1pY+pXeXl5ISQkBASWLNAYMzAwkD2alpF09HRYWFho9CcnJ/
MV90RERERERPTBEERRFes7CaIPUXp60lQqFRxHr4K2ouBCFBERUVL3ZLG/0k6BiIiIXiP3d2haWhqMjY0LfRyfjSE
iIiIiIiIiKsdYHCIiIiIiIiIiKse45xDRW3Zojk+RlvMRERERERERvUtc0UREREREREREVI6x0EREREREREREVI6x
0EREREREREREVI5xzyGit8x16ka+yp6I6APAV7kTERHRh4orh4iIiIiIiIiIyJEW4iIiIiIiIiIyJEW4iIiIiIiI
IiIyJEW4iIiIiIiIiIyJEW4ohICAAGiBAEATo6uquidu3amDhxIjIyMpCULCSNvdq0Hz80AIiMjJT1V61aFZ07d8
bFixdl5/nnn38wd0hQ1KxZEwqFAubm5vDw8MCxY8dkcUePHkWhDh1QsWJF60vro2HDhggNDUV0To4sThAE60vr448
//pD1d+vWDQEBARrXefToUWhra8PT01NjLPc64+Pj87xHkZGRMDExkZ27oPaqefPmQVtbG/Pnz5f6rK2tC5yjbdu2
UlXyWNg7uUdERERERERE7zsWh4rJ09MTycnJuHnzJubMmYMK1Zg4sSJ0nhsbCySk5Nl7e0PP5bGjY2NkZycjLt37
+Knn35CRkYG0nbsiGfPnkKxXl5eSEhIwJo1a3D16LXs3LkTbdu2xYMHd6SYH3/8EW3atEGNGjVw4MABXL58GWPJhs
XcuXPh7e0NURRleQuCgGnTphXqGsPDwzF69Ggc0XIEt2/fLu6tAgCNe5GcnIxjx45BqVRi5MiRGvEREREGYPHkywSP
Dpb5Tp05Jx27duhUAC0XKFAlv27ZteZ77bd4jIiIiIiIiovcDx2VfTLkreQDA19cXBw4cwPbt2xEYGAgAMDmZk8bz
IgiCNG5hYfX48ahS5cuuHLLCho2bIjU1FQc0XIEcFXaNoM0DQDAysoKzZol1k+bIyMjA4MGD0aVLF3z33XdS/6BBg
1ClalV06dIF0dHR6N27ztZ02evRohIaGYuLEiWjYsGG++WVKZCA60hqntP1CSkoKIiMj36hg8uq9ePz4MYYN4YmTZ
porPI5ePAgnjx5g1mzZmHt2rU4d0gQXfxcULlyZSnG1NQUAFLShXZCqW8ruNt3SMiIiIiIiKiDwFXDpUQAwmDZGV
lFevY1NRUBniwAQcgg6sLAFaqlVAqldi+fTsyMzPzPG7v3r24f/++bMVSrs6d08PW1hYbN26U9bds2RKdOnVCUFbQ
gTLFRUXBzs40dnZ28PPzQ0REhMYKmfRv39/pKamYvPmzDRkdcolWo1fHx8oKurCx8fH6jV6mKf523eolDlZmYiP
TldloiIiIiIiIjK0haHSdJkyexYcMGtGvXTupr2bKLv0DJbS/vb50WlgaUglDQ0NURfGmzZtQpcuXBvbw8A0N
HRQWRkJNasWQMTEx00atUKwchB+P3336U5r169CgCoV69ennnZ29tLMS8LCQnB7t27cfjw4XyvSa1Ww8/PD8CLR+g
ePXqE/fv3F+Gu5C8kJAQXmTHYSWMHKLWqJBtLT0/Hlq1bpXP7+flhy5YtxS60vM17LncXKpVKapaWlsXKmYiIiIi
i0hdYnGomGjiYqBUKqGvr48WLVrAxcUFy5cvl8ajoIQHx8va9ra2tK4kZER4uPjcebMGaxatQp16tTBqlWrZ0fw8
vLC3bt3sXPnTnh4eCAuLg4fffQRIiMjZXH5regRRTHPzZ7r16+Pfv36SY/AverKLSs4efIkvL29AbwoVPXu3Vu2/0
9x/fzzz/jyyy8GRkJR0dHjFENGzagdu3a0piTkxNq166NTZs2vdF5S/oe5SUoKAhpawLSu3PnTrHzJSiIiIiInp
Xu0dQMbm6umLlypXQ1dVFtWrVpMfBkpKSAACWlpawsbHJ93gtLS1p3N7eHikpKejduzc0HToki9PX14e7uzvc3d0x
bdo0DBo0CN0nT0dAQABsbW0BAJcuXULLi01znH58mXur18/z/PPnDkTtra22L59u8aYwq1GdnY2qlvLwJoghdX
V08fPgQFStWzP/GF0Dqlavw9fXFF198gZ49e+YZEx4ejosXL8oeNXv+/DnUajWGDBLS5H0+rXuUF4VCAYVCUEqciY
iIiIiIiEoTVw4Vv6GhIwXsbGBLZSUvht7EuHHjKJCQgB9//LHAuPr16yMjIwMA80mn8LU1BShoaEacTt37sS1a9f
g4+0T5zyWlpYNNWoUgoDZy+7ZWdnY+3atQgNDZwtekpISICVLRXWR19fr0tLT09H165d4eLigtmzZKZC/78eZw+
fRpxcXGyc86dAinTp3ChQsXinzet3GPIiIiIiIiD4kXdn0lty/fx8pKsmyPhMTE+jr6+cLigtmzZKZC6tatGx48e
ICEPxtiwiABaNSoEYyMjHD69GksXLgQXbt2BfCiQPxtt9/C29sbQ4YmWahRo2BsbIz9+/dj0qRJ6NGjB3r16pVvj
FBQfj+++9x69Yt6WldMTEExePjwIQY0HAiVSiWL79GjB9RqNUaNGiX1XblyRWPeV1fiiKKIPn36ICMjA4sXL8bff/+
tcUzlypWhVqvRrFkzuLi4aIy3aNECarUa55ysyfd68vI27HERERERERHRh4Qrh94SNzc3WFhYyNrrHk8a03YsLl26
hm2bN00pVMLZ2RLLiyBi4sLGjRogC+/BKDBw/G119/LR3To0cPHDhWAHfu3IGLiws70zw1VdfYcqUKdi0aV0e+
+nkMjU1RWBgIJ4+fSrlqdVquLm5aRSgGbd7IMXHx+Ps2bNSn7e3Nxo3bixrd+/eLR13+/ZtxMTE4M6d07Czs904Lx
YWFrhx4wbWrVSHly+vPHP18vLCunXr80zZswLvYV5K+h4RERERERERfUgEsSTft05EkvT0dKhUKji0XgVthUFpp0N
ERG/ozKJ+pZ0CERERUYfyf4empaXB2Ni40Mdx5RARERERERERUTnG4hARERERERERUTnGDamJ3rJdC3yKtJyPiIi
iIiI6F3iyiEiIiIiIiIionKMxSEiIiIiIiIionKMxSEiIiIiIiIionKMew4RvWUuUzfyVfZERGUUX09PRERExJVD
ERERERERETLGotDRERERERERETLGItdRERERERERETLGItdRERERERERETLGItdVGoEQSiwBQQESLExMTFo27YtjI
yMUKFCBTRt2hSRkZF5zrtmzRo0a9YMhoaGMDIygouLC2JiYmQxcXfXEAQBqampec6RkZGBwMBA1K5dG/r6+ghcuTL
atm2rMQ8RERERERHR+47FISolycnJUgsLC40xsbGsb+nSpQCA5cuXo2vXrmjZsiV0nDiB33//Hd7e3hg2bBgmTpwo
m3PixIkY0nQoevXqhYSEBJw8eRL/+9//0LVrV3z99deFzm3YsGHYvn07vv76a1y+fBm7d++GL5cX7t+/X6L3gIiI
IiIiKi08VX2VGRmZc2lf6tUKgiCI0sDgDt37mDChAn4/PPPMW/ePKl/woQJ0NPTw5gxY9CzZ0840zv+PHJCA0Nxb
JlyzB69Ggpd7cuXj69CnGjx+PrL27wtLS8rW57d4q1C0uXlKwHDh0AANbW1vj444/f9JKJiIiIiIiIyhyuHKIybcu
WdaCjKytJYIQAQ40hWkPxMaNGwEAGzdHFKpNChQzViJ0yYgKysLGzduRVQ5zU3N8fPP/+M//77r9C5fZmZj09
XdaIiIiIiIiIyjoWh6mMu3r1KLQqFSwsLDTG9PT0ULT2bVy9elWkrV0nDvT09DRiqlWrBpVKJcw+znff5YejR4/Cz
MwMTZs2xbhx4/Dbb78VeExISAhUKpXUCrNCiYiIiIiIiKi0sThE7zVRFCEIQonHuri440bNm9i/fz+8vLxw8eJF/0
9//8Ps2bPzPSYoKAhpawLSu3PnTqH0RURERERERFSawByiMs3W1hZpaWm4e/euxtizZ89w8+ZN1K1bV4q9ceMGnj1
7phF79+5dpKenS7GFoauri//973/44osvsHfvXsyaNQuzZ8/0c34AUCgUMDY2ljUiIiIiIiIiKiso7FISrTvLy8oK0j
g9DQUI2xVatWISMjAz4+PgAab29vPhr0CN9++61G70LFi6GrqwsVl69i51K/fn1kZ2fj6d0nxZ6DiIiIiIiIqKzh2
8qoTktZsyWLLyIiRMnQl9fH3379oWuri527NiB40BgTJgwAc70zgCAFilaY0zYsZg0aRKePXuGbt26ISsrC+vWrc
PSPUsRFhamsQ/Q+fPnYWRKJ0tzcJc27Zt4ePjgyZnmsDMzAyJiYkIDg6Gq6srVwQERERERERHRB4XFISrZxo0bhZp
16mDx4sVYunQpcnJy40DggJUrv6J///6y2LCwMDRq1AgrV67EL19+CUEQ8NFHH2H79u3o3LmzxtwuLi4afaIowsPD
A2vWrEFwcDAeP36MatWqoV0nTpg2bpbu04iIiIiIiKi0iCIoiiWdhJEH6L09HSovCo4jl4FbYVBaadDRER50L0oX
2mnQERERFRicn+HppqWLFempF+45RERERERERERUjrE4RERERERERERUjnHPIaK37NAch25iTURERERERGUWVw4RER
EREREREZVjLA4REREREREREZVjLA4REREREREREZVj3H0I6C1zmbqRr7InIiqj+Cp7IiIiIq4cIiIiIiIiIq1lg
cIiIiIiIiIiIqxlgcIiIiIiIiIiIqxlgcIiIiIiIiIiIqxlgcjWEBAQAQAwNgwjbERI0ZAEAQEBATiYl9tnp6e
0jHW1tZsV4GBAaytrdGrVy/8+uuvsrmTkPigCALi4+Nl/Vu3bkXbtm2hUqmgVCrRqFEjzJo1Cw8ePJDFPXnyBBUrV
oSpqSmePHmikulitXcwsKKd10IiIiIiIiI3hMsDLGJsLS0xKZN2RFLqdPn2Ljxo2oWb0mLnBt0XPJycmytnHjRl
nMrFmzkJycjCtXrmDt2rUwMTGBm5sb5s6dW2AeU6ZMQe/evdG0aVP88ssvUHDhAkJDQ5GQkIAfFvhBfRt161Y0aNA
A9evXx7Zt297wDhARERERER9n/gqeyorH330EW7evIlt27AhT58+AITB27bB0tISTwXLSuFqAqYm5sX0J+RkZEU
U7NmTbi4uMDCwglTpk1Djx49YGdnp3HMyZMnMW/ePISFhWHS2LFSv7W1Ndzd3ZGamiqLV6vV8PPZgyiKUKvVU5ER
ERERERE5QLXDlGJ6d+/PyIiIqTP4eHhGDBgQInNP3bsWiIiIb07duQ5vn79eiiVSowYMSLPcRMTE+nfn27cwLFjx9
CrVy/06tULR48exc2bN98ov8zMTKSnP8saERERERERUVnH4hCVmL59++LlKSNISkrCH3/8gd9++w1+fn4acTExMVA
qlbI2e/bs185vamqKKlWqICKpKc/xa9euoXbt2tDV1X3tX0Hh4Wjfv2055CnpyfCw8Nfe1xBQkJCoFKppGZpafLG

8xERERERER9G3ysjEpMpUqV0LFjR6xZswaiKKJjx46oVKmSRpyrqytWrlwp6zM1NS3U0URRhCAIRR57WU50DtasW
Y0LS5dKfX5+fHg3bhxmzpwJbW3t0uXyqqCgIIwfP176nJ6ezgIRERERERLXksDLGJGjBgAEaNGGUA+Oabb/KMMT
Q0hI2NTZHvnv//Pu7du4datWrl0W5ra4sjR44gKyurwNVDe/bswV9//YXevXvL+nNycrB37160b9++yLkBL/ZSUiG
UxTqWiIiIiIiIqLTwstIqUz6ennj27BmePXsGDw+PEp176dKL0NLSQRdu3fIc9/X1xaNHj7BixYo8x3M3pFar1fD2
9kZ8fLys9enTB2qlukRzJiIiIiIirruHKISpS2tjYuxbok/TsvmZmZSELJkfXp60jIHKH777//kJKSgqysLNy6d
Qvr1q3D6tWrERISku+qI2dnZ0yePBkTJkzAX3/9he7du6NatWq4fv06VqlahdatW8PX1xe7du3Czp070aBBA9nx/v
7+6NixI+7du4fKLSSDAP766y/Ex8fL4mrWrFnox+CIiIiIiIiIyjqHKSISZ2xsDGNj43zHd+/eDQsLC1lr3bq1LGB
atGmwsLCAjY0N+vbtI7S0N0zfvx+BgyEFnnvBggXYsGEDTpw4A08PDzg40GD8+PFo1Kgr/P39sXbtWhgaGqJdu3Ya
x7q6usLIyAg//PCD1Ld48WI0btXy1nbu3FnE00JERERERERUdgmIKIqlnQTRhyg9PR0qlQq0o1dBW2FQ2ukQVEEz
izqV9opEBEREZWy3N+haWlPbS7aeBVXDHERERERERERLWmsDHERERERERERLWPckJroLts0x6dIy/mIiIiIiIiI3i
WuHciIiIiIiIiKsdYHciIiIiIiIiKsdYHciIiIiIiIiKse45xDRW+YydSNfZV/08NXyRERERET0pUHKISiIiIi
iIiKicozFISiIiIiIiKicozFISiIiIiIiKicozFISiIiIiIiKicozFIXrr/vnnHwwd0hQ1a9aEQqGAubk5PDw8
c0zYMQCatbU1BEGAIAioUKECGjRogG+//VY2x5MnTzB9+nTY2dlBoVCgUqVK6NGjBy5evCiLmzFjhjSXlpYwqlWrh
j59+uDonTtIsKqSxvJrM2bMAABs3boVzs70UKLUMDIygo0DAyZmMPB07hcRERERERHRu8S3ldFb5+XlhaysLKxZsw
ala9fG33//jf379+PBgwdSzKxZsB48GA8evQIkZGRGDzSGExMTNC7d29kZmbCzc0Nt2/fRmhoKJydnfH3338jJCQ
Ezs70iI2NRfPmzaW5HBwcEBSbi+fPn+PGjRsY0XIkevXqhSNHjiA50VmKW7x4MXbv3o3Y2FipT6lUIjY2Ft7e3pg3
bx66d0kCQRCQmJiI/fv3v5sbrKREREREREPQ0sThEb1VqaiQ0HdmCuLg4tGnTBgBgZWWFZs2ayeKMjIxbgm40AJgzZ
w6io60xfft2907dG2FhYTh27Bj0nTSHR0dHaY7c1T0DBw7EhQsXIAGCAEBHR0eaqlq1ahg8eDDGjBmDjIwMgR94UQ
h60TZXTEwMwrdUjUmTJkL9tra26NatW8neHciIiIiIqIygi+V0VulVCqhVCqxfft2ZGZmFvo4fX19ZGVLAQA2bNg
Ad3d3qTCUS0tLC+PGjUNiYiIseHlynCclJQXbtm2DtrY2tLW1C3Vuc3NzXLx4ERcuXCh0vgCQmZmJ9PR0WSMiIiI
IiIq6lgcordKR0ChKZGRWLNmDUXMTNCqVssEBwfj999/zzM+0zsbkZGR0H/+PNqlawcAuHr1KurVq5dnfG7/latXp
b7z589DqVSiQoUKsLCwQFxcHEa0HALDQ8NC5T69Gg0bdoUDRs2hLW1Nby9vREeHv7a4LZISAhUKpXULC0tC3U+Ii
IiIiIiotLE4hC9dV5eXrh79y527twJDw8PxMXF4a0PPkJKZKQUEXgYCKVSCQMDA4wc0RKTJk3C0KFDXzu3KIoAID1
SBgB2dnaIj4/HqV0nMHfuXDg50WHu3LmFztF00BA//fQTrl+/jqlTp0KpVGLChAlolqWZhj9+n09xQUFBSEtLk9qd
03cKfU4iIiIiIki0sLiEL0T+vr6cHd3x7Rp03D06FEEBARg+vTp0vikSZMQHx+PP/74A48ePcLChQuhpXiz9PW1
haJiYl5znv58mUAQN26daU+PT092NjYwMHBACHBwXBycsLw4c0LnH0d0nUwaNAgrF69GmfPnkViYiKioqLyjVcoFD
A2NpY1IiIiIiIiorK0xSEqFfXr10dGRob0uVKlSrCxsUGlatVqk4AAwNvbG7GxsRr7Cj1//hxLlixB/frlNfyjetm
XX36JjRs34uzZs8X019raGhUqVJDlTEREREREREPQh4NvK6K26f/8+evbsiQEDBqBR0oYwMjLC6d0nsXDhQnTt2rVQ
c4wbNw47duxA586dZa+ynzdvHi5duoTY2FiNgTLlateuja5du2LatGmIiYl57flmzJiBx48fo00HdRcyskjqaiqWL
VuGrKwsuLu7F/raiYiIiIiIn4HLA7Rw6VUKuHs7IwLS5bgxo0byMrKggWlJQYPHozg40BCzaGvr49ff/0VISEHCA
40xh9//AEjIy04urri+PHjaNCgwWvnmDBhAlqaoUTJ07A2dm5Ng2bdrgm2++Qb9+/fD333+jYsWkaNy4Mfbu3Qs
707tC5UXERERET0vhD3B19iahEpaenQ6VswXH0KmgRDeo7HXqHzizqV9opEBERERERET70zQtLaIi++ByzyEi
IiIiIiIionKMxSEiIiIiIionKMew4RvWwH5vjwtfZERERERERUzHqLEBERERERERFR0cbiEBERERERERFR0cbiE
BERERERERFR0cy9h4j4mepG/kq+3Kgr7InIiIiIqL3CVc0ERERERERERGVYyW0ERERERERERGVYyW0ERERERERER
GVYyW0ERERERERERGVYyW0vUUpKSKYPXo0ateuDYVCAUtLS3Tu3Bn79++XYo4ePYo0HTqgYsWK0NfXR80GDREaGoq
cnBzZXIIgQBAEHD9+XNafmZkJMzMzCIKAuLi4YsUnJSVBEATEX8drXE03bt0QEBAGfW7bti0EQcCmTztKcWfHybC2
tpY+R0ZGwsTERBbz7NkzLFy4EI60jqhQoQIqVaqEVq1aISiIaLLZwBLYo0ePQltbG56enLJfQECAdF35tdy4bt26y
ea7c+c0Bg4ciGrVqkFPTw9WVLYY03Ys7t+/L4sr7PURERERERERfShYHHpLkpKS8PHHH+PXX3/FwoULcf78eezevR
uurq4Y0XIKa0DDH39EmzZtUKNGDRw4cACXL1/G2LFjMXfuXhH7e0MURdmclpaWiIiIiKpX9+00PUCqVeeZQ1PjC0tf
Xx9SpUzUK0gV59uwZPDw8MH/+fAwZMgRHjx7FyZmMXLkSCxfvhwXL16UxYeHh2P06NE4cuQIbt++DQBYunQpkpOT
pQYAEERERGN2vunnzJpo0aYKrV69i48aNUH790latWoX9+/eJRysWePDgwRtFhXEREREREdH7isWhT2TEiBEQBEnT
55Ejx49YGtrCwcHB4wfPx7Hjx9HRkYGBg8ejC5duuC7776Dk5MTrk2tMWjQIKxZswZbtmxBdHS0bE5/f39s2rQJT5
48kfrCw8Ph7++fZw5fjS8sHx8fPKWl4fvvvy/0MWFhYTh06BD279+PkSNHwsnJCbVr14avry90nDiBunXrSrEZGRm
Ijo7G80HD0altJ0RGRgIAVCoVzM3NpQYAJiYmGn2vgJlyJPT09LB37160adMGNWvWRPv27REbG4u//voLU6ZMeePr
IyIiIiIiInpfsTj0Fjx48AC7d+/GyJEjYwhoQDFuYmKcVxV34v79+5g4caLGe0f0nWFRa4uNGzfK+j//+GPUqLULW
7duBfDiUalDhw6hb9++eeR1PjCMjY2RnBwMGBNmowMjIXChbN+/Xq4ubmhcePGGm06urqy+xQVFQ70zVY22dnBz8
8PERERGUQCubBgwYs2cPRWYAQMDA9mYubk5+vTpg6ioKnn8xbk+4MUje+np6bJGRERERERERVENaxOPQVXL9+HaI
owt7ePt+YqlevAgDqlauX57i9vb0U87L+/fsjPDwcWItHqjP06IDKLsvne56ixhfwBiBejoK+vJ6+++qpQ8deuXsvw
frxMrVbDz88PA0Dp6YlHjx7J9mkqimvXrKEUxXzvc7169fDw4UPcu3dP1L/U6w0AkJAQqFQqqVlaWhYrZyIiIiIi
qJ3icWhtyB3FuruBsmFic2rP6/j/fz8c0zYmDy8eR0RkZEYMGBAgFMXNb6wFAoFZs2ahUWLFuHff/99bXx+1/0qK1
eu40TJk/D29gYA60jooHfv3lKBq6TL910V9foAICgoCGLpaVK7c+d0iedLREREREREVNJYHhOL6tatC0EQcOnSpXx
jbG1tASDfmMuXL8v24cllZmaGTP06YeDagXj69Cnat29fYC6FiVepVACatLQ0jbHU1FRp/FV+fn6wtrbGnDlZCswB
eHG9Bd2PXGq1GtnZ2ahevTp0dHSGo60DLstXYtu2bXj480Frj3+VjY0NBFAyMjInu0XL19GxYoVUaLSJY2xolwf8
KKgZGxsLGtEREREREREZR2LQ2+BqakpPDw88M033+S5Z0lqaiO+/fRTmJqaIjQ0VGN8586duHbtGnx8fPKcf8CAAY
iLi00/fv2gra392nxeF1+xYkVUrlwZp06dkvU/efIEFYehJ2dXZ7zamlpISQkBCtXrkRSULKB0fj6+iI2Nhbnp3
TGMv0zkZGRgays70xdulaHiaGiJ4+XmoJCQmwsrLC+vXrX3utrzIzM407uztWrFgh25gbAFJSURB+/Xr07t07z1VN
Rbk+IiIiIiIiovcVi0NvyYoVK5CTk4NmzZph69atuHbtGi5duoRly5ahRysWMDQ0xLffffosd03ZgyJAh+P3335GUl
AS1Wo2AgAD06NEDvXrlynNuT09P3Lt3D7NmzSpULowJnzHxIubNm4cffvgBN27cw0nTp9GvXz/o60hI+//kpWPHjn
B2dsa3335bYA6ff/45WrVqhXbt2uGbb75BQkICbt68iejoaDg70+PatWuIiYnBw4cPMXDgQDRo0EDWevToAbVaXaj
rfdXXX3+NzMXMeHh44NChQ7hz5w52794Nd3d3VK9eHXPzn3j6yMiIiIiIiIj6X7E49JbUqlULZ8+ehaurKyZMmIAG
DRrA3d0d+/fvx8qVKwEAPXr0wIEDB3DnzH24uLjAzs40X331FaZMmYJNmzblu0ePIAioVKkS9PT0CpVLYMeInTpyIO
XpMYPHixXB0DES3bt0giiI0Hz782sejFizYgKdPnxYYo1AosG/fPkypBNffvstmjdvjzQmZL2ZsmUYM2YMGjRoAL
WADtC3tzwfY/Py8KJ8fDz0njlbqGt+wd26dXH69GnUqVMHvXv3Rp06dTbkyBC4urri2LFjMDU1fePrIyIiIiIiInp
fCWJx3xFORAVKT0+HSqWC4+hV0FYyLHY69A6dWdSvtFMgiIiIiIqJyKpD3aFpaWpH2weXKISiIiIiIiIiKicozFISi
IiIiIiKickyntBMg+AdmuPD19oTERERERFRmcwVQ0ERERERERE5RiLQ0ERERERERE5RiLQ0ERERERERE5Rj3H
CJ6ylymbuSr7Msgvm6eiIiIiIjoBa4cIiIiIiIiIiIqxlgcIiIiIiIiIiIqxlgcIiIiIiIiIiIqxlgcIiIiIiIiI
IqxlgcogIFBASgW7dueY5ZW1sjLCxM9lkQBfMrUaNGge0CIGD+/PLSzNatW+Hs7AyVSgUjIyM40dhgwoQJAIC2bdv

meXxus7CwgIODA4YMGaKR6+TJk2FLZYX09HRERkbCxMSkwGv0a35PT8+i3TWiIiIiIiKi9wDfVkyLatasWRg8eLD0
WVtbu8BxADAYMgIAXMbGwtvBg/PmzU0XLl0gCAISEx0xf/9+AMC2bdvw7NkzAMC0d3fQrFkzxMbGwsHBQTrX7du30
aJFC3z22WdSMef48eNYsmQJ9u7dC2Nj40Jdh6enJyIiImR9CoWisLeBiIiIiIiI6L3B4hCVKCMjI5ibmxdrPCYmBq
1bt8akSZ0kPltbW2nlkqmpqdT/90lTAICZmZlsvsqVK2PKLCKYNGGQLly4AH19ffTv3x8jR46Eq6troa9DoVAUeB1
EREREREREHwo+VklZhrm50S5evIgLfy680TxTpkYbYUfXowZg6lTpwIAQkJCSiLFAMVmZiI9PV3WiIiIiIiIiMo6
FoeoRAUGBkKpVEpt2bJlBY4rLurExcUBAEaPHo2mTzuiYc0GsLa2hre3N8LDw5GZmVmKHHR0DLB27Vps3rwZy5cvx
9q1a2FgYFCk0WJiYjTynD17doHHhISEQKVSSc3S0rJI5yQiIiIiIiIqDXysjErUpEmTEBAQIH2uVKLSgeMAUL16dQ
CAoaEhfvrpJ9y4cQMHDhZa8ePHMWHCBcxduhThjh1DhQoVCp1HvXr140XlhdTUVDRt2rTI1+Hq6oqVK1fK+l5+rC0
vQUFBGD9+vPQ5PT2dBSiIiIiIiIq81gcohJVqVIL2NjYFHscA0rUqYM6depg0KBBmDJLCmxtbREVfYX+/fsXKRcd
HR3o6BTvT9zQ0PC1eb5KoVBw02oiIiIiIiJ67/CxMirTrK2tUaFCBWRkZJR2KkREREREREQfJK4cotdKS0tDfHy8r
091j1j157///knKSqsr0KFCjA2NsaMGTPw+PFjd0jQAVZWVkhNTcWyZcuQLZUFd3f34qafp5ycHI1r0tPTQ/369Q
G82Fz61Tx1dHQ0HpMjIiIiIiIet+x0ESvFRcXh8aNG8v6/P39izXXtGnTMG3aNFnf0KFDsWrVkrRp0wbffPMN+vX
rh7///hsVK1ZE48aNsXfvXtjZ2RU7/7w8evRI45qsrKyQLJQEANI9ezcsLCxk43Z2drh8+XKJ5kFERERERERU2gRR
FMXSToLoQ5Seng6VSgXH0augrSja29Lo7TuzqF9pp0BERERERFSicn+HppqWldjYUNDHcc8hIiIiIiIiIqJyjMuH
iIiIiIiIqJyjHs0Eb1lh+b4FGk5HxEREREREDG7xJVDRERERERETLGItdRERERERERETLGItdRERERERERETLGP
ccInrLXKZu5KvsyC+yp6IiIiIiI0gFrhwiIiIiIiIiIirHwBwiIiIiIiIiIirHwBwiIiIiIiIiIirHwBwiIiIiI
iIirHwBwQ4wICAiAIAgRBgK6uLmrXro2JEyciIyMDSULJ0pggCFCpVGjevDL27dqlMc+TJ08wffp02NnZQaFQoFKL
SujRowcuXrwoi5sxY4Y0n460DipVqgQXFxeEhYUhmZNTFmTtbY2wsDCNc4WFhcHa2lrWL56ejilTpsDe3h76+vowN
zeHm5sbtm3bhl3bsmuI682Y8YM6Xrj4+Nx5swZCIKAI0e05HnfPDw80KVLf+keduvWDQBeex5fX19UqFABGzZskM
33/PlztGzZet27dy/o6yIiIiIiIiJ67/BtZe8BT09PREREICsrC4cPH8agQY0QkZGBwMBAAEBsbCwCHByQmpqKFSt
WwMvLC2fPnkWDBg0AAJmZmXbzc8Pt27cRGhokZ2dn/P333wgJCYGzszNiY2PRvHlz6Xw0Dg6IjY3F8+fPcf/+fcTF
xWH0nDn44YcfEBcXByMjoyLln5qaitatWyMtLQ1z5sxB06ZNoa0jg4MHD2Ly5Mk4ceIEkp0TpfjFixdj9+7diI2Nl
fqUSiX+/fdf6fPHH38MR0dHREEReOHRr1rLz3blzB7Gxsdi2bZtGLi+fJyoqCt0mTc0VKlekPgMDAazRv3hyjR4+Gq6
srLCwsAACchoaG4fv06tm/fXqRrJyIiIiIiIirWBx6DyGUCpibmwMAfH19ceDAAwzfvL0qDpmZmcHc3Bzm5uaY03c
uli9fjgMHDkjFobCwMBw7dgnzpz2Do6MjAMDKygpbt26Fs7MzBg4ciAsXLkAQBACAjo60dL5qlaqhYc0GcHd3h60j
IxYsWIA5c+YUKf/g4GakJSXh6tWrqFatmtRva2sLHx8f60vrQ0fn//8ULUqLLIdcLxeHAGDgwIEIDg7GsmXYLGHoK
PVHRkaicuXK6Nix0Yul8+pUqkgCILGeUaPHo0d03Zg80DBiImJweXLlZft2jRs3LgRVapUKdK1ExEREREREZV1fK
zsPWRgYICsrCyN/qysLHz//fcAAf1dXal/w4YNUHnZVpaWhg3bhWSEx0RkJBQ4Dnt7e3Rvn37PFfjFOT58+fYtGk
T+vTpIysM5cotBBVHnz59kJWvhc2bN0t9oigimjIS/v7+xZ5XEARETERg80HD+P777xQEIEDevXtLj6bLjZmZe+np
6bJGREREREREVNaX0PSe0XnyJDZs2IB27dpJfS1btoRSqYS+vJ4mTJgAa2tr90rVSxq/evUq6tWrl+d8uf1Xr1597
bnt7e2RLJRUpHz//fdFPHZ4EPb29K06rjBMTU3RrVs3BERESH1xcXG4efMmBgwY8EZz16xZ2FhYRg2bBju3r2LpU
uXvvaYkJAQqfVlaWR5RDKRERERETvAotD74GYmBEP+NoIRQu4uLhgz+fLl0nhUVBT0nTz3wsbGbtXr4a
pqWmh5hZFEQCKR8pef1uYu0LOXxwDBw7EoU0HcP36dQBAeHg4WrVqBTS7uZeueu3///rCwsMCYMW0gUqLeG8UFIS0
tDsp3blz541zICiIiIiInrbu0fQe8DV1RURv66Erq4uqlWrJj0ylruKx9LSEnXr1kXdunWhVCrh5eWfXMRaX8cW
1tbJCYm5jn35cuXaQB169Z9bR6XLl1CrVqlpM/GxsZIS0vTiEtNTZWKZUrv0bFihVx6dKlwl9wEbi5uchKygqRkZ
GYPHkytm3bhq+//rrE5tfr0Sn042kKhQIKhaLezk1ERERERET0LNdL0HvA0NAQNjY2sLkyku0llJc2bdqgQYMGmDt
3rtTn7e2N2NhYjX2Fnj9/jiVLlqB+/foa+xG96vLly9i9eze8vLykPnt7e5w6dUoj9tSpU9LKHS0tLfTu3Rvr16/H
3bt3NWIZmJkQnZ1d4LkLlGgC+vfvjzVr1mDDhg300tKSPVJHREERERERERAVjcegDNGHCBH77bf466+/AADjxo1Ds
2bN0LlZz2zevBm3b9/GqV0n40XlhUuXlKgTvsse+8r0zkZKSgru3r2L8+fPY/ny5WjTpg2cnJwwadIkKW78+PH45Z
dfMGvWLCQmJiIXMRGzZ8/G7t27MWHCBCLu3rx5sLS0hL0zM9auXYvEXERCu3YN4eHhcHJywqNHj97oevv374+7d+8
i0DgY3t7esjeXEREREREREVBWBz6AHXq1AnW1tbS6iF9fX38+uuv8Pf3R3BwMGxsb0Dp6QlbtW0cP34czZs3Lx1/
8eJFWFhYoGbNmmjbt2io6MRFBSEw4cPQ6LUSnHnmzfHnj17EBsbi9atW6N169bYu3cv9uzZA2dnZymuYsWK0H780
Pz8/DBnzhw0btWY//vf/7Bx40YsWrSoUPv5FKRmzZpwc3PDw4cP33gjaiIiIiIiIqLyRhBzdwmmohKVnp40LuoFx9
GroK0wK0106BVnFvUr7RSiIiIiIhKV07v0LS0NBgbGxf60K4cIiIiIiIiIiIqLgcIiIiIiIiIiIqX/gqe6K37NA
cnyIt5yMiIiIiIiI6l7hyiIiIiIiIiIioHGNxiIiIiIiIiIioHGNxiIiIiIiIiIioH00eQ0RvmcvUjXyVfQnja+iJ
iIiIiIhKDL0EREREREREVYyW0EREREREREGVYyW0EREREREREGVYyW0EREREREREGVYyW0UEBAEQABAGCI
EBXvXe1a9fGxIKtkZGRGaSKJaiCgPj4eI3j2rZti88//lZWd/HiRfTqVl0gQqFA3bp18vewXX+Lx48AQE1400
lc+bxXIyEgAQE50DpYsWYJGjRbX18fJiYmaN++PX777TnXJ49e4ZFibxho48+ggGhIVQqFRWdHTF16LtcvXs32zv
V0dFBzZo1MXz4cDx8+FBjzidPnqBixYowNTXFkydPNMatra2luSpUqIAGDRrg22+/lcYjIyNhYmKS5z0XBAHbt2/H
latXUaFCBwZysEE2/vz5c7Rs2RLdu3fP83giIiIiIiKi9xWLQ2WUp6cnkp0TcfPmTcyZMwcrVqzAxIkTizTH8ePH4
ezsjGfPnuGnn37ClatXMW/ePKxZswbu7u549uwZwrZsieTkZKn16tVL0ndu6927N0RRhLe3N2bNmoUxY8bg0qVL0H
jwICwtLdG2bVts375d0m9mZibc3d0xb948BAQE4NChQzhz5gwWLLyI+/fvY/ny5Xlea1JSElavXo1du3ZhXgrGte
zdetWNGjQAPXr18e2bdvvyvOZZs2Yh0TkZv//+07p164Zhw4YhKiqq0PfM1tYW8+fPx+jRo5GcnCz1h4aG4vr167Ji
ExEREREREdGHgK+yL6MUCgXmzc0BAL6+vjhW4AC2b9+0wMDAQh0viiIGDhyIevXqYdu2bdDSeLEHtLKygq2tLRO3b
owlS5YgMDBQ0g8AGBgYIDMzU9YHAFFRUdiyZ0t27tyJzp07S/3fffc7t+/j0GDBsHd3R2GhoZYsmQJjhw5gtOnT6
Nx48ZSRi2NDTw8PCCkYr7XWqNGDfTu3VtarfQytVoNPz8/iKIItVqNPn36aMQYGRlJc82ZMwfR0dHYvn07evfuXaj
7BgCjR4/Gjh07MHjwYMTEx0Dy5cuYnm0aNm7ciCpVqhR6HiIiIiIiIqL3AVc0vScMDAYQLZVV6Pj4+HggkjiZi/Pjx
UmEol60jI9zc3LBx48ZCz7dhwwbY2trKCK05JkyYgPv372Pfvn0AgI0bN8LD3V1WGHqZIAj5nufmzZvYvXs3dHV1Z
f03btzAsWPH0KtXL/Tq1QtHjx7FzZs3X5u3vr5+ke5bbn4RERE4fPgwwv/+ewQEBKB3797o1qlbgcdLZmYiPT1d1o
iIiIiIiIjK0haH3gMnT57Ehg0b0K5d06mvZcuWUCqVsnb48GFp/OrVqWCAevXq5TlnvXr1pJjCuHr1aoFzvXz0qle
vws70ThbTvXt3Kc+WLvVxKmJiYqBUKmfYIA6deogMTFRY4VUEHq42rdvL+0550npiFdw8Hzzc70RMrkJM6fPy+7
b2lpaRr3TaUahxfS2ZNhIWFYdiwYbh79y6WLLlawn15ISQkBCqVSmqWlpavPYaIiIiIiIotLE4VEblFkz09fXRo
kULULi4yPbqiYqK0nx8vKw1adKk0P0LljgCp7ieHm+V+desWIF4uPjMWDAGkz7Fyurq6Ij4/HiRMnMHR0aHh4eG
D06NHSe50DtbsWQM/Pz+pz8/PD2vWrEF0To5srsDAQKnQNHLkSEyaNAlDhw6Vxo2MjDTUw16bewNA//79YWFhgTF
jxkCLUr32+o0CgpCWlia103fuvPYIiIiIiIiotLGPYfKFKfDXV6xcuRK6urqoVq2a9JhVULISAMDS0hI2NjayYwwM
DKR/29raAgASEXPh50SkMf/ly5dRt27dQudja2uLxMTEPMcuXboEANJ8devWxeXL12UxhFYAAABTU10N4w0NDaVrW
bZsGVxdXTFz5kzMnj0bALBnzx789ddfGvsG5eTkY0/evWjfv3UN2nSJAQEBKBChQqwsLDQKFJpaWlp3LeC60joQE

encP9NFAoFFApFoecmIiIiIiIiKgu4cqIMyi2YwFLZaey/Uxh0Tk6wt7fHkiVL8Pz5c9lYQkICyMnj4ePjU+j5vL2
9ce3aNezatUtjLDQ0FGZmZnB3dwcA+Pj4YN++fTh37lyR8waA6d0nY/HixdIr79VqNby9vTVW+/Tp0wdqtVp2bKVK
lWBjY4NqIaqV+MooIiIiIiIiIiog8Ri0MfKEEQsHrIaiQmJsLLywsnT57E7du3sXnzZnTu3BktWrTA559/Xuj5vL290
b17d/j7+00tViMpKQm//47hg4dip07d2L16tUwNDQEAiwbNw4tWrTAJ598gqVLL+Ls2b04desW9uzZg19++QXa2t
oFnqtt27ZwHDAvHnzC0/ePezatQv+/v500KCBPn7+2Pnzp24d+/em9wqIiIiIiIionKNxaEPWKtWrXD8+HFOa2u
jQ4c0sLGxQVBQEPz9/bFv374iPQILCAKio6MxZcoULFmyBPb29vjf//6HP/74Awc0HJC9yUftXx/79+/HF198gYiI
CLRu3Rr16tXD559/jlatWmH79u2vPd/48ePx/fffY8WKFTA0NJRtKp3L1dUVRkZG+OGHHwp9HUREREREREQKJ4iK
JZ2EkQfovT0dKhUKjioXgVthcHrD6BC070oX2mnQEREREREV0bk/g5NS0uDsbfXoY/jyiEiIiIiIiIionKMxSEiIi
IiIiIionKM7InessOzfEp0nI+IiIiIiIioneJK4eIiIiIiIiIiMoxFoeIiIiIiIiIiMoxFoeIiIiIiIiIiMox7jl
E9Ja5TN3IV9m/BL9NT0REREREVHq4coiIiIiIiIiIqBxjcYiIiIiIiIiIqBxjcYiIiIiIiIiIqBxjcYiIiIiIiIiI
qBxjcYhKREBAAARB0GjXr19HQEAAunXrphE7f/582Rzbt2+HIAh5zm9nZwc9PT389ddfGmNt27aFIAjYtGmTrD8sL
AzW1tayvmfPnmHhwoVwdHREhQoVUKLSJBbRq1QoRERHIysoq8Fo8PT2LcWeIiIiIiIiIyYwH6jEeHp6Ijk5WdZqla
qVZ6y+vj4WLFiAhw8fvnbeI0e040nTp+jZsyciIyPznW/q1KLsGScvz549g4eHB+bPn48hQ4bg6NGjOHnyJEaOHIn
ly5fj4sWLBV7Lxo0bX5srERERERER0fuGxSEqMQQFAubm5rKmra2dZ6ybmxbvMzc0REhLy2nnVajV8fX3Rt29fhIeH
QxRFjRgfHx+kpaXh++/z3eesLAWHDp0CPv378fIkSPH50SE2rVrw9fXFYd0nEDdunULvJaKFSsw4i4QERERERER
V9YHKJSoa2tjXnz5mH58uX4888/843777//sHnzZvj5+cHd3R0ZGRmIi4vTiDM2NkZwcDBmzZqFjIyMP0dav3493N
zc0LhxY40xXV1dGBoaFvt6ACAzMxPp6emyRkRERERERFTWsThEJSYmJgZKpVJqPXv2LDC+e/fuchJyvwTp0/ON2bR
pE+rWrQsHBwdoa2vD29sbarU6z9gRI0ZAX18fX331VZ7j165dg729fbGuRaLUYvbs2QeExISApVKJTVLS8tCnYuI
iIiIiIioN0mUdgl04XB1dcXKLSulz4VZibNgwQJ88sknmDBhQp7jarUafn5+0mc/Pz+4uLggNTUVJiYmsliFQoFZs
2Zh1KhRGD58uMZcoijmu+H1664FAExNTQs8JigoC0PHj5c+p6ens0BEREREREREZ5XDlGJMTQ0hI2NjdQsLCxee4
yLiws8PDwQHBysMZAyMigTJ05g8uTJ0NHRgY60Dpo3b44nT57kuzm0n58frK2tMWf0HI0xW1tbXLP0qVjXYMnj89r
iKEKhGLGxsawRERERERERLXUsDlGpmz9/Pnbt2oWjR4/K+tvqNVxcXJCQKID4+HipTZ480d9Hy7S0tBASEoKVK1ci
KSLJNubr64vY2Fic03d047js70x89yoiIiIiIiIi+pCx0ESlrmHDhujTpw+WL18u9WVLZeGHH36Aj48PGjRoIGuDB
g3CmTNnkJCQK0d8HTt2hL0zM7799ltZ/+eff45WrVqhXbt2+0abb5CQkICbN28i0joazs70uHbtmhSbmZmJLJQUWf
v333/fzg0gIiIiIiIiKkUsDlGZMHv2bNkr6nfu3In79++je/fuGrF169ZFW4YN8109BLzYy+jp06eyPoVCgX379mH
y5Mn49ttv0bx5czRt2hTLli3DmDFj0KBBayL29+7dsLCwLXWVuXwJUSERERERERLS2C+PIvciIqMenp6VCpVHAc
vQraCoPSTqdM070oX2mnQERERERE9N7L/R2alpZwP1lwXKIIiIiIiIiIiKgcY3GIiIiIiIiIiKgc0yntBIg+dIfm+
PC19kRERERERFRmceUQEREREREREVE5xuIQEREREREREVE5xuIQEREREREREVE5xj2HiN4yl6kby+Wr7P16eiIiI
IiovcDVw4REREREREREZVjLA4REREREREREZVjLA4REREREREREZVjLA4REREREREREZVjH1xxKCAgAN26ddPo4u
LgyAISE1Nlf6dV0tJSZEd9+eff0JPTw/29vZ5nk80BGzfvl36PGPGjHnzmlJJSUmYMMGnJycN0ZLSkqCIAiIj48v
0nV/+umn0NBwXvHjxzXGAGICIAgC5s+fL+vfvn07BEGQPr98X7S0tKBSqdC4cWNMnjvZycnJhc4lv3S0Gxsrjedu
7W1dYh3qm3btrK4V6/v888/12IK0vfl39/Nmzf4+0DatWqQV9fHzVq1EDXrl1x9epVjKebAgQnWdXWFqakPLSogL
p168Lf3x/Z2dmFvg9ERERERE74MPrjhUFFeuXEFyrcKsValSRRYTGRmJXr164fHjx/jtt99e0+fEiRn189WoUQ0
zZs2S9VlaWpboddy+fRvHjh3DqFGjoFar84zR19fHggUL8PDhw9f0d+XKFdy9exenTp1CYGAgYmNj0aBBA5w/f77Q
0Tk40GjcwXcXF424U6d0SeNbt26Vzp/bt23bNtk1BAYGFuvcr44cAQA8e/YM7u7uSE9Px7Zt23DlyhVERUWhQYMGs
EtLAWBcvHgR7du3R90mTXHo0CGcP38ey5cvh66uLp4/f17oe0BERERERET0PijXr7KvUqUKTExM8h0XRRERERFYsW
IFatSoAbVajVatWhU4p1KphFKpLD5ra2vDyMgI5ubmJZW2hoiICTq1AnDhw9Hs2bNEBYWBKNDQ1mMm5sbrl+/jpC
QECxcuLDA+XLvi7m50WxtbdGla1c0btwYw4cP4osr60jo10oa65cubL0b1NTU9n5XzV06FCsXLKSP//8Mzp06FCs
cycmJuLmzZv49ddfYwVLBQCwsrKSfa/79u2DhYWF7D7VqVMHnp6er70eIiIiIiIiovdNuV459DoHDhZ4A8eP4ebmh
r59+yI60hr//fdfaac1k1vA8vPzg729PWxtbRedHa0Rp62tjXnz5mH58uX4888/i3Q0AwMDDBS2DL/99hv++eeFkk
q9yKytrTFs2DAEBQUVewVP5cqVoawLhS1btiAnJyfpGHnzcyQnJ+PQoUNFmjszMXpP6emyRkRERERERFTwfZDFoZi
YGGkFT25r3769RlyNgjVkmXZ2drJxtVoNb29vaGtrw8HBATY2NoiKiiqxPM+fp6+Rp40DQ5HmiI2NxePHj+Hh4QEA
8PPzy/fRsu7du8PjYqNtp08vcq65e/YkJSUVKv7Va2vWrFmRz5mXqV0n4tatWli/fn2hz61UKjFo0CAAQPXqlbFs2
TJMmzYNFStWxCeffILZs2fj5s2b0vE9e/aEj48P2rRpAwsLC3Tv3h1ff/31a4s9ISEhUKLUUivpxweJiIiIiIiI3o
YPsjjk6uqK+Ph4WVu9erVG30HDh2Uxe/bskCZSU10xbds2+Pn5SX1+fn4IDw8vsTzt70w08vz555+LNidarUbv3r2
ho/PiCUEfHx+c0HECV65cyTN+wYIFWLNmDRITE4t0HLEUAUC2gXVBXr223P2E3LTlyUxceJETJs2Dc+ePSvUuePj
4zF37Lxp0TikUhJSCG6devQKULbN68GQ4d2t3bx+AF6usIiIi80eff2LhwoWoVq0a5s6dK+1lLj+goCCKpaVJ7
c6d0yVyzURERERERERv0we555ChoSFbsGkXfXk9SLwRVq189xzassGEDnj59CmdnZ6LPFEU8f/4ciYmJqF+//hvnqa
enp5FnbpGnMB48eIDt27cjKysLK1eulPpzcniQHh60BQsWaBzj4uICDw8PBACHiYAgONdnunTpEoAXj3YVRl7XVlL
Gjx+PFStWYMWKfCu+5tGREbp06YIuXbpgzpw58PDwJw5c+Du7i7FVK9eHX379kXfvn0xZ84c2NraYtWqVZg5c2ae
cyoUCigUiuJfGBEREREREVEp+CBXDpUetVqNCRmmyFafJCQkwNXvtURXD72J9evXo0aNGkhISJDlGRYWhjVr1uT72
vX58+dj165d0Hr0aKH08+TJE3z33XdwCXGRBSbDwPRKJb788kvMnTu3RPblyX3VfUZGRr4xStWhIWFYExRERERE
RER0+jD3LLUGH9888/ePr0qazPzMwMFy9exNmzZ7f+/Xppr51cPj4+mDJLCKJCQqCrqwsAuHXrFuLj42VxNjY2sre
WvQ1qtRo9evRagWYNZP1WVLYIDAzETz/9hK5du2oc17BhQ/Tp0wflly/Pc97c+/Lff//hzJkzWLhwI7991/Za+VL
25AhQ7BkyRJs3LhRtroLALKzs5GSKIrEwQBvatWRXx8PKZPn46+ffuifv360NPTw8GDBxEeHo7AwEAAwLfffov4+
Hh0794dderUwdOnT7F27VpcvHgX33tGRERERERE9L4q18WhVzegBoBjx45h/fr1qF+/vkZhCAC6deuG4cOHY9euXf
jss88AvHjM6VUHDhxA27ZtSzznXGf0nEFCQgK+/57jTEjIyN8+umnUKvVeRaHAGD27Nl5vtUMeHfBEGAuqlE7dq
18emnn2L8+PGFejX9u6KrQ4vZs2fD19dXY+zixYuwsLCQ9SkUCjx9+hQ1atSatbU1Zs6ciaSkJAiCIH0eN24CAKBZ
s2Y4cuQIhg0bhr370obhw/fvh1t2rR5J9dHRERERERE9K4IYu50w0RUotLT06FSqeA4ehW0FQalnc47d2ZRv9J0g
YiIiIiIqFzJ/R2alpYGY2PjQh/HPYeIiIiIiIiIiMoxFofKsGHDhkGpV0bZhg0bVmp55ZeTUqnE4cOHSy0vIiIiI
IiIio6PLZWhv3zzz/5vo3L2NgYVapUeccZvXD9+vV8x6pXrw4Dg/L3CFveirucj4iIiIiIiKg4ivs7tFvSF3WVaL
SpdKQQAwxsbEp7RSIiIiIiIiIqITwSTIiIiIiIionKMxSEiIiIiIionKMj5URvWUuUzD+EK+y56vpiYiIiIiI
Pkxc0UREREREREVI6x0EREREREREVI6x0EREREREREVI6x0EREREREREVI6x0ESFEhAQAEeQpGZmZgZPT
0/8/vvvAICKpCQIgoD4+HiNY7t164aAgAdp882bN+Hj44Nq1apBX18fNwRUQNeuXXH16LUpRhAEbN++XfZZX18ff/
zxR4Fzv5pnbvP09JRizp07h06d0qFKLSrQ19eHtbU1evfujX//VeK2bp1K5ydnafSqWBkZAQHBwdMmDChmHePiI
IiIiIq0xicYgKzdPTE8nJyUh0Tsb+/fuho60DTP06FWm0Z8+ewd3dHenp6di2bRuuXLmCqKgoNGjQAGlpaQeKwgC
pk2bVqQ8c9vGjRsBAP/88w/c3NxQqVil7NmzB5cuXUJ4eDgsLCzw+PFjAEBsbCy8vb3Ro0cPnDx5EmfOnMHcuXPx7

NmzI0rERERERER0fuAr7KnQlMoFDA3NwcAmJubIzAwEC4uLrh3716h50hMTMTNmzfx66+/wsrKCGBgZWVfVqlavf
bY0aNHIZQ0FBMnTKTDhg0Lleerjh49ivT0dKxevRo60i+/GvVqoVPPvLEiomJiUHRlq0xadIkqc/WlhbduUrzcU
SERERERERvVe4coiK5dGjRli/fj1sbGxgZmZW60MqV64MLS0tbNmyBTk50UU6Z8uWldGpUycEBQUVNV2Jubk5sr0z
8e0PP0IUxXjLl68iAsXLhRp7szMTKSnP8saERERERERUVnH4hAVWkxMDJRKJZRKJYyMjLBz505ERUVBS6vfw0bVq
1fHsmXLMG3aNFSSwBGffPIJZs+ejZs3bxbq+JCQE0zevRuHDx8uVJ65bfbS2QCA5s2bIzg4GL6+vqhUqRLat2+PRY
sw4e+/5a0Hz16NJo2bYqGDRvC2toa3t7eCA8PR2Zm5mtzU6LUUro0tCzUNRERERERERGVJhaHqNBcXV0RHx+P+Ph
4nDhxAp9++inat2+vsUn064wcORIPkSLYt24dWrrRogc2bN8PBwQH79u177bH169dHv379EBgYWKg8c9vIKS0l8blz
5yILJQWRvQlC/fr1sWrVKtjb2+P8+fMAAENDQ/z000+4fv06pk6dCqVSiQkTJqBZs2bSvKR5CQoKQlpamtTu3LLTh
LtCREREREREVDpYHKJCMzQ0hI2NDWxsBNCsWT0o1WpkZGTg+++/h0qlAoA8N5V0TU2VxnMZGRmhS5cumDt3LhISEv
C///0Pc+bMKVQeM2f0xLLz52RvM8svz9xmamoqizEzM0PPnj0RGhqKS5cuoVq1a1i8eLEspk6d0hg0aBBWr16Ns2f
PIjExEVFRUfnmpVAoYGxsLGtEREREREREZV2xik03bt0q6TzoPSQIARs0tPDkyRNUrFgRLStXxqlTp2QxT548wcWL
F2FnZ1fgPPb29sjIyCjUeS0tLTFq1CgEBwcXed+iv0jp6aF0nToFnt/a2hoVKlQodI5ERERERERE74tiva3MxsYGL
i4uGDhwIHr06AF9ff2SzoVkoMzMTKSkpAAAHj58iK+/hQPHj1C586dAQATJ07EvHnzULVqVbRs2RIPH7EggULoK
0jAz8/PwBAfHw8pk+fjr59+6J+/frQ09PDwYMHHER4eXuCjYq8KCgrC999/j1u3bqF379755pLLR0cHLSpVQkxMDDZ
t2gRvb2/Y2tpCFEXs2rULP//8MyIiIgAAM2bMw0PHj9GhQwdYVWkhNTUVy5YtQ1ZWftzd3Yt9/4iIiIiIiIjKomIV
hxISEhAeHo4JeyZg1Khr6N27NwYOHImzZqVdH5UhuzevRsWFhYAXjwWZm9vj82bN6Nt27YAXhSHLEoLFi9ejBs3b
sDEXATNmzfH4c0HpUesatSoAwtra8yc0RNJSUK0BEH6PG7cuELnYmpqisDAQAQHBxeYZy470ztcvnwZ9evXR4UKFT
BhwgTcuXMHCoUCdevUxerVq9G3b18AQJs2bFDNN9+gX79++Pvvv1GxYkU0btwYe/fuLXAFFBEREREREdH7SBDze59
3IWRnZ2PXrl2IjIzEL7/8grp162LgWIHo27cvKleuXJJ5Er130tPToVKp4Dh6FbQVBqWdzhs7s6hfaadARERERERE
Bcj9HZqWllakfXDfaENqHR0dd0/eHdHR0VwYAFu3LiBiRMnokaNGujXrx+Sk5PfZHOiIiIiIiIiInrL3gg4dPr0a
YwYMQIWFhb46quvMHHIRNy4cQ0//vor/vrrL3Tt2rWk8iQiIiIiIiIiIioregWI+VffXVv4iIiMCVK1fQoUMHDBo0CB
06dICW1v/Xmq5fvw57e3tkZ2eXaMJE74viLucjIiIiIiIiIiKo7i/g4tlobUKleuxIABA9C/f3+Ym5vnGV0zZk2oler
iTE9ERERERERER09IKR8ry870Rp8+feDn55dvYQgA9PT040/v/0bJERERERERERHR21Xk4pC0jg5CQ00RK5PzNvIh
IiIiIiIiIqJ3qfIPlbVr1w5xcXEICAg04XSIPjwuUze+d6+y52vriYiIiIiIiIyo9iFYfat2+PoKAgXLhWAR9//DEMD
Q1l4l26dCmR5IiIiIiIiIiI600qVnFo+PDhAF68texVgiDwkTmiIiIiIiIiovdEsYpDz58/L+k8iIiIiIiIiIioFB
R5Q2oiIiIiIiIiIvPWfLs4dPDgQXTu3Bk2Njaow7cuunTpgs0HDxdpjoCAAAiCIDUzMzN4enri999/l2JycnKwZMk
SNGrUCPr6+jAxMUH79u3x22+/acz35MkTTJ8+HXZ2dLaoFKhUqRJ690iBixcvyuJmzJgBJycnWd/hw4dhYmKC0aNH
QxRF50TKICQkBPb29jAwMICPqSmaN2+0iIiIiI3j0aNHoa2tDU9PT42xpKQkCIKAKLwq4L///pON0Tk5YcaMGdLnt
m3bSvdJoVCgevXq6Ny5M7Zt2lakfF6+30qlEo60joiMjJTFxMXFyeJebikpQKBe3M08xmNjYwsct7e3z/0a9PT0UK
d0HQQFBSEzMzPfnF9umzZtkuXboEEDjUcaTUxMNK7v3LlZ6NmzJ6pWrQp9fX3Y2tpi80DBuHr1qux7yasdp368SPE
fiIiIiIiIqKwRvDnFo3bplcHNzQ4UKFTBmzBiMgjUKBgYgaNeuHTz2FCkTw9PZGcnIzk5GTs378fjo66NspEWBA
FEV4e3ht1qxZGNMDCSduSDBw/C0tISbdu2xfbt26V5MjMz4ebmhvDscMyePRtXr17Fzz//jJychDz70xf40/6nn
36Ch4cHxo4di+XLl0MQMbuYMQNhYWGYPXs2EhMTceDAAQwepBgPhz4s0vWFh4dj90jR0HLkCG7fvp1nzhH//YfFix
e/dq7Bgwcj0TkZ169fx9atW1G/fn14e3tjyJAHRcopIiICycnJSEhIQ0/evdG/f3/s2bNHI+7KLsvSd5PbqlSpIo0
70DhojLu4uBQ4fuTIkXyvaeHChfjmm29kRbFXc365devWTRZz48YNrF27tsBrj4mJQfPmzZGZmYn169fj0qVL+0GH
H6BSqfDl11/KYmNjYzX0+fHHHxc4PxEREREREdH7plh7Ds2d0xcLFy7EuHHjpL6xY8fiq6++wuzZs+Hr6lvouRQKB
czNzQEA5ubmCAwMhIuLC+7du4dff/0VW7Zswc6d09G5c2fpm0+++w7379/HoEGD407uDKNDQ4SFheHYsWM4d+4CHB
0dAQBWVlbYunUrnJ2dMXDgQfY4cAGCIMj0v2HDBvTv3x+LFi3CmDFjpP5du3ZhXigR6Nmzp9SX029hZWRKIDo6Gqd
OnUJKSgoiIyMxbdo0bjRo0fjq6++wsIRI2Xf1ldVqFBBuleWlpZo3rw5703tMWDAAPTq1Qtubm6FysvExESaJzg4
GKGhodi7dy88PDxkcVWqVIGJiUm+8+j06EjzFGf81WuqWbMmNmzYg179yIkJCTfnPMzevRoTJ8+HT4+PtDX19cyf
/z4Mfr37480HTrgxx9/LPpr1aoFZ2dnpKamyuLnZMxee04iIiIiIiKi912xVg7dvHlTVqzJ1aVLF9y6davYyTx69A
jr16+HjY0NzMzMsGHDBtja2uZ5rgkTJuD+/fvYt28fgBdFHnd3d40CjpaWfSaNG4fExEQkJCTIxr755hv0798farV
aVhgCXhSqfv31V9y7d6/Y1xMVfQU70zvY2dnBz88PEREREVRI87Hxwc2NjaYNwtWkc/h7++PihUrFvnxMuDFI3vR
0dF480ABdHV1i3x8SuTISMBvv/1W7Fw+/xzZGdn4+uvv85zfM+ePfj3338xefLkPMcLkoQVRmZmJtLT02WNiIiI
IiIqKwRvNHI0tIS+/fv1+jfv38/LC0tizRXTewMLEollEoljIyMsHPnTkrFRUFLSwtXr15FvXr18jwutz93n5iixA
LApUuXMGfRUKKxcRJ+fn4ax3z11Ve4d+8ezM3N0ahRIwbnNgy//PJLka5NrVZLc3t6euLROd53jdBEDB//nx8991
3uHhJrPHoOaWLBvtbwyQJLRX6GB8fHyiSigUCvT3RumpqYYNGiQRlyNGjWk70apVLM0Lk42f78ed14s2bChX
KpUa51mxYoWUi50TE+7du4dJkyblm/PL7ebNm7KYChUqYpY0YqJCLUAWprGHNeuXQMA2b5HBWnZxsQGOV/d0+hLI
SEhUKLUUivq/wUiIiIiIiKi0lCsx8omTJiAMWPGID4+Hi1btoQgCDhy5AgIy0xd0nSIs3L6uqKLStXAgAePHiAFS
tWoH379jh58mShjn/1MbG85K7WeTm2Ro0aMDExwckFC9G+fXtYWFjIjqlfvz4uXLiAM2f04MiRiZho6BA6d+6MgIA
ArF69+rXnvHLlCk6ePcmt6NHR0UHV3r0RHh6e5+NfHh4eaN26Nb788ssi79skimKh7k0uJUuWwM3NDXfu3MH48eMx
btw42NjYamQdPnwYRKZG0mcdHmfi52dHXbu3Cl9VigUBY4DKM0HAH369MGUKVQ0np60BQsWwNjYGF5eXvnm/LK8i
i8DBw7EV199hQULFmDevHmysbxWbRUKKipKo+Corad2b3xQUBDGjx8vfU5PT2eBiIiIiIiIiMq8YhWHhg8fDnNzc4
SGhiI60hrAi9U5UVFR6Nq1a5HmMjQ0LBUmPv74Y6hUKnz//fewtbVfYmJinsddunQJAFc3bl0AKDD28uXLSljgRZE
iNjYwn376Kdq2bYsDBw6gWrVqsu00tLTQtGLTNG3aF0PGjc06devQt29fTJkyBbVq1SrwutRqNbKzs1G9enWpTxRF
60rq4uHDh6hYsaLGMfPnz0eLFi3yXDmTn5ychFy7dg1NmzYt9DHm5uawsbGBjY0NNm/eyJMaNG6NjkyaoX7++LK5Wr
VoFPmqLp6eXZ1Gps0MAoFKppJh169bBwcEBarUaAwc0zDPn19HR0cGc0XMQEBCAUaNGycZsbW0BvPh7aNGixWvnsr
S0LNQ5cykUCo0CGREREREREVfZV+xx2Xfv3h1HjhzB/fv3cf+/fRw5cqTihag8CIIALS0tPHnyBN7e3rh27Rp27dq
LERcaGgozMz04u7sDALy9vRebG6uxr9Dz58+XZMkS1K9fX2M/oooVKyI2NhYVK1ZE27Zt8ddffxWYw27xJCMjo8C4
70xsrF27FqGhoYiPj5daQkICrKyssH79+jyPa9asGT777DN88cUXBc7/sjVr1uDhw4d5rrYpDBsbG3h5eSeOKKhYx
5ckXV1dBAchY+rUqXj8+HGx5+nZsycCHBwcc+ZMwf+nn36KSpUqYeHChXke9+qG1ERERERERETLQbFWDpWkzXmMpK
SkAAAEpnyIr7/+Go8ePULnzp3Rpk0bbN68Gf7+/li0aBHAtWuH9PR0fPPNN9i5cyc2b94MQ0NDAMC4ce0wY8c0d07
cGaGhoXB2dsbfff/+NeFPm4dKLS4iNjC3z0SuVSoW9e/fC09NTWkFuo0YNN9jRA61atULLli1hbm60W7duYsGoCLa2
tq/dsyYmJgYPH7EwIEDoVKpZGM9evSAWq3WwNwSa+7cuXBwCNB4hAt48batlJQUZGdn46++/sK2bduwZMKsDB8+H
K6uroW633mZMGECHB0dcfr0aTRp0kTq/+eff/D06VNzrJmZWaE3jM70zpa+21yCIKbQ1ar5HuPr64vg4GCsWLECEy
d0lPpTU1M15jIyMpK+/1fNnz9f4+1rhoaGWL16NXr27IkuXbpgzJgxsLGxwb//ovo6Gjcvn0bmzZtkuLv37+vcU4
TE5M834RGRERERERE9L4qlsqhihUrwTUVK0ZmZmhevXqaN0mDSiIgo11+7du2FhYQELCws40zvjlKLT2Lx5M9q2

bQtBEBAdHY0pU6ZgyZiLS3x//+9z/88ccf0HDgALp16ybNo6+vj19//RX+/v4IDg6GjY0NPD09oa2tjephJ6N58
+b55mBsbIw9e/agaTqWqNu2Le7cuQMPDw/s2rULnTt3hq2tLfz9/WFvb4+9e/fmWbh5mVqthpubm0ZhCAC8vLwQHx
+Ps2fP5nmsra0tBgwYoFGUAYDvv/8eFhYwqF0nDrp3747ExERERUVhXyVbBebz0g0bNoSbmXumTZsm67ezs50+m9x
25syZQs978eJfJe0trKwKPEZPTw+jRo3CwoUL8ejRI6m/f//+GnMtX74833k++eQTfPLJJ8j0zpb1d+3aFUePHoWu
ri58fX1hb28PHx8fpKWLYc6c0bJYNzc3jXNu37690NdPRERERERE9D4QxKLU0osXmwPPnTsX7du3R7NmzSCKIk6d0
oXdu3dj3LhxuHXrFn744QcsX74cgwPfhT5E5V56enPUKLUcBy9CtoKg9J0p0j0L0pX2ikQERERERFREeX+Dk1LS4
0xsXGhjyVWY2VHjhZBnDLzMGzYMFN/t99+i71792Lrlq1o1KgRli1bXuIQEREREREREVEZVqzHyvbs2ZPn69jbtWu
HPXv2AAA6d0iAmzdvv1l2ZdTt27ehVCrzbbdv3y6Vv0bNm5dvTu3bty+VnIiIiIiIiIiobCvWyiFTU1Ps2rUL48aN
k/Xv2rULpqamAF680cvIy0jNMyyDqLWrhvJ4+ALHS80wYcPQq1evPMcMDN6vx5o+JIIfm+BRp0R8RERERERHRu1Ss4
tCXX36J4c0H48CBA2jWrBkEQcDJkyfx888/Y9WqVQCAffv2oU2bNiWabFmho6MDGxub0k5DQ+7G4EREREREREREhV
WsDakB4LfffsPXX3+NK1euQBRF2NvbY/To0WjZsmVJ50j0XiruRmBEREREREREhVhC36HFLg4RUcFYHCiIiIiIqJ
36Z2+rQwAbty4gYiICNy8eRnHYWGoUqUKdu/eDUtLSzg40BR3WqIPjSvUjXyVPREREREREZVZxXpb2cGDB9GwYU0c
OHECW7duxaNHjwAAv//+06ZPn16iCRIRERERERER0dtTr0LQF198gTlz5mDfVn3Q090T+l1dXXHs2LESS46IiIiI
IiIiN6uYhWHZp8/j+7du2v0V65cGffv33/jpIiIiIiIiIiI6N0oVnHIXMQEycnJGv3nzp1D9erV3zgpIiIiIiIiI
J6N4pVHPL19UVgYCBSULgCAKEp3+03377DRmNtKs/fu/XRraCIBTYAgICN0KUSiUcHR0GRmZ55wbNmyAtrY2hg0
bJvWd0XMGgiDgyJEJeR7j4eGBLL26AAACAgLyzMXT010Kt7a2RlhY2Btd+6effgptbW0cP35cYw3h/nz58v6t2/f
DkEQpM9xcF5fLpawLcVgjuDEmT56cZwExPzNmzICTk10+4zk50ViyZAKaNWoEfX19mJiYoH379vjtt980Yp89e
4aFCxfC0DERFSpUQKVKldCqVStEREQgKyLTFnv06FFoa2vL7m2upKQkCIKA+Pj4Ql8HERERERER0fumWMWhuXPhom
bNmqhevToePXqE+vXrw8XFB51btsTUqVNL0se3Kjk5WwPhYEWnJaW9S1dulSKjYiIQHJYmHISetC7d2/0798fe/b
s0ZgzPDwckydPxqZnm/D48WMAwMcffwXHR0dERERoxN+5cwexsbEY0HCg10fp6SnLiZk5GRs3biyx6759+za0HTuG
UaNGQa1W5xmjr6+PBQsW40HDh6+d78qVK7h79y50nTqFwMBAXMbGokGDBjh//vwb5yqKIry9vTFr1iyMGTMGly5dw
sGDB2FpaYm2bdti+/btUuyzZ8/g4eGB+fPnY8iQITh69Ch0njYJkSNHYvny5bh48aJs7vDwcIwePRPhjzB7du33z
hXIiIiIiIiIovdNsYpDurq6WL9+Pa5du4bo6GisW7c0ly9fxg8//ABtbe2SzvGtMjc3L5pKpYIGCb9uUxMTGBubo4
6deog0DgYpqam2Lt3r2y+pKQKHD16FF988QXs7e2xZcsWaWzgwIGIjo5GRkaG7JjIyEhUrwLZHTt2LpOUCoUsD3Nz
c1SsWLHERjsiIgKdOnXC80HDERUVpZETALi5ucHc3BwhISGvna9KlSowNzeHra0tvL298dtvv6Fy5coYPnz4G+caH
R2NLVu2Y03atRg0aBBqlaoFR0dHfPdd+jSpQsGDRok5R8WfoZDhw5h//79GDlyJJycnFC7dm34+vrixIkTqFu3rj
RvRkYGoq0jMXz4cHTq1CnflWBEREREREREH7JiFYdmzZqFx48fo3bt2ujRowd69eqFunXr4smTJ5g1a1ZJ51jm50T
kIDo6Gg8ePICurq5sLDw8HB07doRKpYKfn59sVU6fPn2QlZWfZs3S32iKCIyMhL+/v7Q0dF5J/mLooiIiAj4+fnB
3t4etra2iI601ojT1tbGvHnzShZ5cvz5559F0oeBgQGDRuG3377Df/8888b5bthwwbY2tqic+f0GmMTJkzA/fv3s
W/fPGA+vXr4ebmhsaNG2vE6urqwtDQUPOcFRUF0zs72NnZwc/PDXERERERBFsdh5ZmZmIj09XdaIiIiIiIyrpiFY
dmzpjJR48eafQ/fvwMY2f0f00kyiofHx8oLUooFAr07t0bpbqamGDRokDT+/PlzREZGws/PDwG7e2NY8e04fr16wA
AU1NT0vTqjZowVxCHG7evIKBAwbIzhUTew0LUilrs2fPLHriI2NxePHj+Hh4QEAGKwsl3Xv3h10TK6YpN16kc9j
b28P4MVqqjdx9epV1KtXL8+X3P6rV68CAK5duyad93XUarX0XXL6euLRO0fYv39/sfMMCqMBsqWsmqWlZbHnIiIi
iIiInpXilUcEkVRtilxroSEBJiamr5xUmXVkiVLEB8fj3379sHJyQlLliYBjY2NNL53715kZGSgffv2AIBKLSrh00
8/RXh4uBQzc0BAHDp0SCoYhYeHo1WrVrCzs50dy9XVFfHx8bI2cuTIERk0tVqN3r17SyuVfHx8c0LECVy5ciXP+AU
LFmDNmjVITEws0nlyV+Hk9bdS0nLPkd/f5quuXLMckydPwtvbGwCgo60D3r17y76rogoKCKJaWprU7ty5U+y5iIiI
iIiIiN6VIj3HVLFiRenNVLa2trIf4Tk50Xj06JHSDV0fGnNzc9jY2MDGxgabN29G48a0aRJE9SvXx/Ai0LPgwcPU
KFCBemY58+f49y5c5g9eza0tbXh5uYGKysrREZGYvLkydi2bRu+/vprjXmZGhrKCK8L5cGDB9i+fTuysrKwcuVKqT
8nJwfh4eFYsGCBxjEuLi7w8PBACHCw9Pa2wrh06RKAf29Wex02trb5FqZyz5G7L5Ctra3UVXc1Wo3s7GxUr15d6hN
FEbq6unj48GGx9ndSKBRQKBRFP06IiIiIiIioNBWp0BQWfgZRFDFgWADmNLTtLmznP4erK2t0aJFixJPsiyysbGB
L5cXgoKCsGPHDty/fx87duzApk2b40DgIMU9f/4c//vf//DLL7+gU6d0EAQB/fv3x+rVq1GjRg1oaWmhV69e7yzv9
evXo0aNGrI3fAHA/v37ERISgrlz5+a599H8+fPh50QEw1vbQp3nyZMn+0677+Di4oLKLsu/Uc7e3t7w9fXFrL27NP
YdCg0NhZmZGdzd3QEAvr6+CA40xrlz5zT2Hcr0zkZmZiYUCGxWrL2L0NBQfPrpp7IYLy8vrF+/HqNGjXqjnImIiI
iIiIjeF0UqDvn7+wMAatWqhZyTW2psxlzeTJgwAY60jjh9+jS0HDkCMzMz90zZE1pa8qf10nXqBLVajU6d0gEA+vfv
jlmzZiE40Bje3t6yTJZzZWmIuILrdano60DSpuQSZ//+usvXmFHy2Jq1qxZ4KN9arUaPXR0QIMGDWT9VLZWCawMx
E8//YsUxbtqHNewYUP06dMHY5cvz3Pef/75B0+fPsV//2HM2f0Y0HChfj333+xbdu2fHN51ZMnTzSuR6LuwTVbG5
s3b4a/vz8WLVqEdu3aIT09Hd988w127tyZs3/x979x6X8/3/D/xx6aqrwlVXKqLISSEVYQfT4oUzRmTJeiV0wxz
nuJzPYQxjczVwRgx1hw2D0UdW120z0eQUJo05FEU6vh9+PX+eruud6ipR6XG/3d63m+tlfL6vlz4fPf6v971dzhq
1Chs374d7du3x6xZs9CmTRuYmprixIkTmD9/PtRqNVJTU3Hv3j2EhYVJEpwA0K1bN6jVaklySNvjdh4eHjAwMND53
oiIiIiIiIggqzK9Hqtt27binx89eoTc3FxJvZmZ2YtFVUU0atQIfn5+mDp1Kv755x98+0GHGokh40luLKCGIPz777
+oXbs26tWrBz8/P+zatUvjI0pC03bsgK2traTMzc0N586dEz8vXLgQCxcuLLSJjo4u8tGvkypIjK5Gd99951Gnam
pKfz9/aFwQ7UmhwBg1qxZwt9qVhibTCaDUqmEk5MT/P39MXr0aJY2GhtR01KSorGbp+2bdsiMTERGzZswNKL57F4
8WIMHToUCoUCLVu2REJCAatq0aS02VygU+02337B48WJ8++23GDt2LIyNjdGwYUOMGDECXl5emDJLcvz8/DQSQ8DTt
Zo7dy7++0MPMcLwEC7Rs65cufLCj8sRERERERERVQYyoQzv7s70zsb48e0xYcMG3LlZr6M+Pz+/XIIjqsomZ0hUq
nQePgK6CmMKjqcUjn5Rd+KDoGIiIiIiIhKqfD30IyMjFJt3CnT28rGjRuHvXv3IjIyEgqFAqtWrckMGTNgZ2eH1at
XL2VIIiIiIiIiIiKqAGVKDm3duhWRKZHo1q0b5HI5/ve//2Hy5MmY03cu1q5dW94xUikMHjwYSqVS61WRb5IRKiaL
UokDBw5UWFxERERERERE1V2ZHitTKpX4+++4eDggLp162Lz5s1o1qwZrly5gkaNGuHhw4cvI1bSwa1bt5CZmam1z
szMDNbW1q84oqcuXrxYZF2d0nVgZFS1HrvSRVm38xEREREREREGVRVL/Dy3TgdR0Tk5ITU2Fg4MDPDw8sGHDBjRr1g
xbt26Fubl5WYakcmJtbV1hCaDi0Ds7V3QIRERERERERKRfM4r69+/P5KTKwEA4eHh4tLDo0aNwrhx48o1QCIIiI
iIiIiennK9FjZ865du4YTJ07A2dkZb7zxRnnERVTL8bEyIiIiIiIiepVeyWNle/fuxbBhw3DkyBHJJPXq1YNKpUKr
Vq2wYsUk/09//yvNsESvNe/J6yrtq+z5ynoiIiIiIiIqLWNL55YswcCBA7Vmn1QqFQYNGoQvv/yy3IIjIiIiIiI
qKXq1TJueTkZHTS2LHien9/f5w8efKFgyIiIiIiIiIolejVMmhf//9F/r6+kXWy+Vy3L59+4WDIIiIiIiIiKiV6
NUyaE6derg90NTRdb/+eefsLW1feGgiIiIiIiIj0lShVcqhz586Y0NuUqHj9+rFH36NEjTJs2D16dCm34KJqjwLFL
iBUxNTZGXlyeWPXz4EP6+hoHk8B4cAAymQwpKSLwdHSETCbTu0bNm6cxh7+/P/T09HDkyBEAQGppqta+z17T08X
2yULJWmM6ePjg1GjRkk+axtn80DBYptny5VKJR03boyYmJgX+wKJiIiIiIiIKqLSva1s8uTJ2Lx5M1xdXTFs2DC4u
bLBJpPh7Nmz+Prrr5Gfn49Jkya9rFipAvn6+uLhw4c4ceIEWrRoAeBpEsjGxgbHjx9HdnY2jI2NAQCJiYmws70Dq6
srAGDmzJkY0HCgZDXTU1PJ52vXruHw4cMYNmWY1Go1WrRoAXt7e6SLpYltFi5ciB07dmD37t1imVKpXh//VegeXk

4cCBmzpwpKSuMvVB0dDQ6duyIrKwsxMXFoX///rC1tUVAQECp5iIiIiIiIiKq7EqVHKpduzY0HTqEIU0GIDw8HIig
AHi60yIgIACRkZGoXbv2SwmUKpabmxvs70yQmJgoJocSExPRtWtXJCQk4NChQ/Dz8xPLfX19xb6mpqawsbEpdvzo6
Gh06dIFQ4YMQbNmzbBkyRKYmJhI+imVSsjlco2xSpScMjY2LjEec3Nzsc3EiR0xaNEi7Nq1i8khIiIiIiIeiu2U6r
EyAHBwcMAvv/yC//77D0ePHSwRI0fw33//4ZdffoGjo+NLCEJEqC8fHyQkJIiExIS40Pjg7Zt24rLT548weHDhyX
JoZIIgoDo6GiEhITA3d0drq6u2LBhQ7nHXxb5+fnYsGED7t69W+XH7ACQk50DzMXMyUVERERERERU2ZU60VSoZs2a
e0edd9CsWTPURfMzPG0iSSrHxwe///478vLy80DBA5w6dQre3t5o27YtEhMTAQBHjhzBo0ePJMMhCRMmQKLUSq7C9
gCwe/duZGdni7tyQkJCoFarSx1fqLatN0Y5c0CARrvIyEiNdrGxsZI2wcHBUCqVUCGUAoKgoWFBT7++ONi54+IiI
BKpRive3v7Ut8DERERERER0atWqsFkqHrz9fVFLYwJh8/jnv37shV1RXW1tZo27Yt+vTpg6ysLCQmJqJevXpwnI
S+40bNw6hoaGSserUqSP+WalWIygoCHL507+0wcHBGDduHM6fPw83Nzed44uLi0PDhg0LZb1799Zo17t3b42Zsayt
rSWfFy9eDD8/P1y/fh2jR4/GZ599Bmdn52LnDw8Px+jRo8XPmZmZTBARERERERFRpcfkE0nM2dkZdevWUJCAu7du
4e2bdsCAGxsbFC/fn38/vvvSEhIQLt27ST9rKysikys3L17F/Hx8cjNzcU333wjLufn5yMqKgrz58/XOT57e3uNeY
yMjDTaQVSqEhM9NjY2cHZ2hr0zMzZu3IimTZvi7bffhoeHR5F9FAoFFAqFzvESERERERERERVQZLfqyMqidfX18kjiY
iMTERPj4+Ynnbtm2xc+d0HDlYpFTnDaIduxZ169ZFcnIykPKSxGvJkiWiJY1FXl7eS7iL0nF2dkZgYCDcW8Mr0hQi
IiIiIiKicsedQ1Qqvr6+GDp0KHJzc8WdQ8DT5NCQIUPw+PFjjeTQgwcPkJ6eLizNjaGmZkZ1GolunXrBi8vL0m9g
4MDJkyYg03bt6Nr167leg/ZZdka8SgUimLPzh0Zgwan26MEyd040233y7XeIiIiIiIiIigqEnc0Uan4+vri0aNHcH
Z2Ru3atcXytm3b4sGDB2jQoIHG0TtTp06Fra2t5Bo/fjx0njyJ50RkBAYGasxjamoKf3//Mh1MXZLvvvt0I57g40B
i+ZrQ1Ah+fn6Y0nVqucdREREREREVJfkgiAIFR0E0esoMzMTKpUKjYevgJ5C8+yjyuDkF30r0gQiIiIiIiIqJ4W/
h2ZkZMDMzEznftw5RERERERERERUjTE5RERERERERERUjffAaqKXbP/s4FJt5yMiIiIiIiI6lbhziIiIiIiIiIoG
mNyiIiIiIiIiIiIoGmNyiIiIiIiIiIiIoGu0ZQ0Qvmffkda/sVfZ8NT0RERERERERGVFnc0ERERERERERFVY0w0ERERER
ERERFVY0w0ERERERERERERFVY0w0ERERERERERFVY5U20RQaGgqZTIbBgwdr1H366aeQyWQIDQ2VLB86dAh6enro2LG
jRp/U1FTIZDLxqlmzJry9vbFv3z6xza1btzBo0CDUq1cPCoUCNjY2CAGIw0HDh0sV+9y5c6Gnp4d58+Zp1MXExEAm
k2nEep/+fchKMiQmJoplz8ZrYmICfxcXhIaG4uTJkzrHkpiYcJLMBi8vL+Tn50vqzM3NERMT01P8mzZtg6eHq5du
6Z1Hnd3d4wYMQIA40PjglGjRknqL168iAEDBojfbZ06ddC+fXusXbsWeXl5GuN98skn0NPTw/r168WyZ78PbVfh3w
eZTIb4+HjJeNu2bY0Pjw9MTU1hbGyMd955R+PeC/+0Wftb48GDB5K6Jk2aYPr06VrvnYiIiIiIiKggq7TJIQCwt7f
H+vXr8ejRI7Hs8ePHWLduHerVq6fRPioqCs0HD8fBgweLTGLs3r0baWlp2LdvH8zMzNC5c2dcuXIFABAYGIjK5GTE
xsYiJSUFW7ZsgY+PD+7evVuquK0jozF+/HHERUVprZfL5dizZw8SEhJ0GistLQ1//03vv76azx8+BDNmzfH6tWrS
xXTpUuXd06jLf73338flpaWiI2N1Wj/+++4/z58wgLC9M63rFjx/Dmm2/i7Nmz+Prrr/HXX39h27ZtGDBgAFasWI
G///5b0j470xtxcXEYN24c1Gq1WJ6WliZeS5YsgZmZmaRs6dKLWudftmwZunbtlatWuHo0aP4888/0bNnTwePBh
jx47VaP/gwQMSXLhQp++KiIiIiIiIqKqR1MmH998E/Xq1cPmzZvFss2bN8Pe3h5NmzaVtM3KysKGRswZmgQdOnS
Reu0GACwtLSEjY0N3njJDXz77bfIzs7GrL27cP/+fRw8eBDz58+Hr68vHBwc0KxZM4SHh+Pdd9/V0eZ9+/bh0aNHm
DlzJrKysrB/36NNEiYmJuJfvz8+//zzEsczNzeHjY0NHb0D4e/vjx9//BG9e/fGsGHdC0/ePZ3jGj580KZNM4bHvj
+XKX5fX306dMHMTExEARB0icKgpvvfUWJgdurDgeIAGIDQ2f6srfv/9d7z33ntwcXFB06Zn0bt3bxw4CABvVP
GpM/GjRvh4eGB8PBW/P7770hntQUA2NjYiJdKpYJMjTmoe97169cKzSwYjBo1CnPNzowHHwecnz0xZswYfPHFF1i0
aBG0Hj2q8V19+eWuXHXrVonfKxEREREREVfV6mTQwDQv39/REdHi5+joQIwYMAAJXZxcXfWc30Dm5sbQkJCEB0dr
ZHEeJ6xsTEAIDc3F0qlEkqlEvHx8cjJySlzvGq1GsHBwdDX10dwcLBk58uzpk+fjt0nT+PHH38s9RyffffYZHjx4gN
9++03nPqNGjUJeXh6WL19ebLvi4g8LC8Ply5clj+IVJuWK2jWULJSEs2fPYuzYsahRQ/tfN5LmphFDEgIVCoV0nf
uLFn/0vrxxx+Rm5urdYfQoEGDoFQqsw7d0kl5cHawnJ2dMXpmZFLN1Z0Tg8zMTMLFREREREREVNLV+uRQnz59cPDg
QaSmpuLq1av4/fffERISotGuMKEAAB07dsTDhw+xZ8+eIsfNyspCeHg49PT00LZtW8jlcSTExCA2Nhm5uZo3bo1J
k6ciD///FPnWDMZ7Fp0yYxjpCQEPz4449akwR2dnYY0XikJk2apPXMneK4u7sDgLiJRhfgXsaYnm0aIiIiKJGRUa
b4PTw80Lx5c0myZs0GDCjPz0dwcLDWMVNSUGAAbm5uYtmtW7fEZJxSqURkZKRYd+HCBRW5cgRBQUFI0NHR0SgokND
5Xp+fX6VSwdbWVqP0wMAATk50YoyFZDIZ5s2bh5UrV+LSpUs6zxUREQGVSiVe9vb2ZYqZiIiIiIiI6Fwq9MkhKysr
vPvu4iNjUV0dTEffddWFLZSDqcP38ex44dQ8+ePQE8PdMnKChI65k/rVq1glKphKmpKbZu3YqYmBg0atQIwNMzh
27evIktW7YgICAAiYmJePPNN4t8R015P/zwA5ycnMTHq500aQInJyfJocrPmjBhAm7fvl3k2URFKdWR9fy0m5KEhY
XBysoK8+fP1lqvS/xHYWH48ccfxQ0bo6Ki8NFHH8Hc3LzYuZ+N1dLSEklJSUhKSok5uTmePHki1qnVagQEBIhr3Ll
zZ2RLZWH37t2lulddCYKg9XsMCAhAmZtMGXKFJ3HCg8PR0ZGhnhdv369PEMLiIiIiIiIeikqfXIIAAYMGCDu6tH2
SJlarUZeh7q1KkDuVw0uVy0b775Bps3b9Y4lycuLg7Jycm4ffs2bty4obELyDQEB06dMDUQVNX6NAhhIaGytq0a
TrFGRUVhb///LuMQS6X4++//y7y0TJzc30Eh4djxowZyM701vHbAM6ePQsAQf+/vs59gKdJ5smzZ2Pp0qW4efNmme
Lv2bMnZDIZ4wLdicPHiRRw8eLDIR8oAwmMXFBQbw7tw5sUXPTw/0zs5wdnaGXC4Xy/Pz87F69Wps375dnN/Y2Bh3794
t8jssiaurKzIyMrTe75MnT3D58mUxxufNmzcPcXfX0HXqLE5zKRQKmjMSS4iIiIiIiKiyyq5KJIC6duyIJ0+e4MmT
JwgICJDU5eXlyfXq1Vi0aJG4GyUpKQnJyclwHDA2rVrJe3t7e3RoEEDWFpa6jS3h4cHsrKySmx3+vRpnDhxAomJi
ZI49u/fj+PHj+Ovv/7S2m/480GoUaNGkw/a0qbWTV1+fn469ynUvXt3eHp6YsaMGWwK39TUFN27d0d0DSioqLg50
QEHx+fIudr2rQp3N3dsXDhwhIfDfvlll/w4MEDnDp1ShLDxo0bER8fjzt37pT6fgMDAYGxy7Fo0SKNuhUrViArK6v
IR+KanWuGjz76SKeDw4mIiIiIiIqKnnJTSqenp6euFTGT09Purd2zbcu3cPYWFhGm+r6tatG9RqNYYNG1biHHfu
3EH37t0xYMAAvPHGGzA1NcWJEyewYMECd03atcT+arUazZo1g7e3t0Zdy5YtoVarsXjxYo06Q0NDzJgxA00HDTU67
v3795Geno6cnBykpKTg22+/RXx8PFavXL3io1xFmTdvnsaSrTTxh4WF4X//+x/OnDmDswPHFvt4m0wmQ3R0NDp06I
DWrVsJPDwcDRS2RG5uLvbb34/bt2+La6pWq/Huu+9qvPXM09MT00aNwp01azBy5MhS3Wu9evWwYMECjB07FoaGhuJ
TpW/09fXx888/Y+LEiRgzZgyaN29eZP85c+bA09NTss0JiIiIiIiI6HVSJXY0ASjyMR21Wg0/Pz+trZEPDAXEULIS
/vjjjxLHVyqVaN680RYvXgxbv294eXlhypQpGDhwYilv+Hry5AnWrFmDwMBArfWBgYFYs2aNSGydZ/Xrlw90Tk5a6
/r37w9bW1u4u7tjyJAhUCqVOHbsGHR16LXiPRWLXbt2aNeunXgQdmnjB90mDdzc3JCZmYl+/fqVOF+LfiLw8uRJuL
m5YeJQofDw8ECrVq2wb06LF68GE0GDMG///6L7du3a41BJpPho48+Kv0jZ999hl++uknHDhwAG+/Ta8vLzwww8
/4JttvvsHChQuL7evq60oBAwbG8ePHZZqbiIiIiIiIqLTKCSW9752IyiQzMXmQlQqNh6+AnsLoLcx58ou+r2QeIiI
IiIiqnwKfw/NyMgo1Tm4VWbnEBERERERERLT8mh3S0du1aKJVKrZenz2eFxdWpU6ci4507d26FUXERERERERU9PZSvYNKRqa
kpTE1NKz0MDXXq1KnoEiIiIiIiIiIoCuNjZURERERERERE1RiTQ0RERERERERE1RgfyKyN6ybnr3spr7Lna+uJiIi
IiIiIoPHDnEBERERERERFRNcbkEBERERERERFRNcbkEBERERERERFRNcbkEBERERERERFRNcbkUDUUGhoKmUymcXXs
2BEA40joKJYZGRNB0DERPXR0wN69eyXjJCYmQiaT4f79+xpzNGnSBN0NT5eUnTp1Ct27d0ft2rVhaGgIV1dXDBw4E
CkpKRr9/f390aenhyNHjgAAULNTtcb87DV9+nSxXVJSkmS82NhYNGvWDCYmJjA1NYW3tze2bdum9X68vLyQn58vqT

M3N0dMTiW03y4RERERERFR1cLKUDXVSWNHpKwLSa5169aJ9TnNzkRaWhrOnz+PlatXw9zcHH5+fpgzZ06Z5tu2bRt
atGiBnJwcrF27FmfPnsX3338PLUqFKV0mSNpeu3YNhw8fxrBhw6BWqwEA9vb2kljHjBkDt09PSdnYsW01zj127FgM
GjQIPXr0QHJyMo4d04b//e9/6Nq1K5YvX67R/tKLS1i9enWZ7p0IiIiIiIoquGr7KsphUIBGxubIutNTU3F+nrl6
sHb2xu2traY0nUqunXrBjc3N53nys70Rv/+dG5c2f89NNPYnn9+vXrVhLzjZ1H0dHR6NKL4YMGYJmzZphyZILMD
ExkcSrVCohl8s17uG///6TfD5y5AgWLvqEr776Cs0HDxfL58yZg8ePH2P06NH02rUr703txbrhw4dj2rRpCA40hqG
hoc73SURERERERFQVcecQ6WzkyJEQBAE///xzqfrt3LkT//33H8aPH6+13tzcXPyzIAiIjo5GSEgI3N3d4erqig0b
NpQ55nXr1kGpVGLQoEEadWPGjEFubi42bdokKR81ahTy8vK07ioqTk50DjIzMyUXERERERERUWXH5FA1tW3bNiiVS
skla9asYvtYWFjA2toaqamppZrrwoULAAB3d/cS2+7evRvZ2dKICAgAAISEhIiPlpVFSkoKgjRoAAMDA4060zs7qF
QqjTOPjI2NMW3aNERERCAjI0PnuSiIqBSqcTr2d1IRERERERERJUVk0PVLK+vL5KSkiTX0KFDS+wnCAJkMlmp5hI
EQee2arUaQUFBkMufPvEYHByMo0eP4vz586WaszSxabuflsLawWFLZYf78+TqPFR4ejoyMDPG6fv16eYZKRERERERE
9FIw0VRNmZiYwNnZWJZWfGU2+f0nTu4ffs26tevDwAwMzMDAK27a+7fvw+VSgUACHV1BQCc03eu2Phv3r2L+Ph4R
EZGQI6XQy6Xo06d0sJLy0NUVFSp77Fw7kuXLUHJkycadTdv3kRmZiZcXfW06uRy0WbPno2LS5fi5s2b0s2LUChgZm
YmuYiIiIiIiIigqOyaHSGdLly5FjRo18MEHHwAAFXcUKNGDRw/flzSLi0tDTdu3BAPrfb394eVLRUWLFigddzCA6n
Xrl2LunXrIjk5WbKjacmSJYiNjUvEXl6pY+7ZsycePnyIb7/9VqNu4cKF0NfXR2BgoNa+3bt3h6enJ2bMmFHqeYmI
iIiIiIiqCr6trJrKyclBenq6pEwul8PKygoA80DBA6SnpM3NxdXrlzBmjVrsGrVKkRERMDZ2RnA0zeaDR0oCGPGj
IFcLkfjxolx8+ZNTJoCQ0bNoS/vz+Ap7uUVqlahe7du+P999/HiBEj40zsjP/++w8bNmzAtWvXSH79eqjVanTrlg
1eXl6SuBwCHDBhwgRs374dXbt2LdV9tmzZEiNHjsS4cePw5MkTfPDBB8jNzcWaNWuud0LSLFmynNizgebNmyeef0R
ERERERET00uL0owpQx44dsLw1LVxt2rQR66d0nQpbW1s40zujT58+yMjIwJ49ezBhwgTJ0IsXL8bHH3+MiRMnwtPT
E71790b9+vWxa9cu8dwgA0jatSs0HToEfX1990rVC+7u7gg0DkZGRgZmz56NkydPIjk5WesuHLNTU/j7+5f5Y0oLS
5YgMjIS69evR6NGjfdWW29h3759iI+Pl7zeXpt27dqhXbt2Zdq1RERERERERFQVYITSnBZMRDrLzMyESqVC4+EroK
cwKvfxT37rt9zHJCIIiIiIoqqr8PfQjIyMUP2Dy51DRERERERERETVGJNDRERERERERETVGA+kJnrJ9s805mvtiYi
IiIiIqNLiziEiIiIiIiIiomqMySEiIiIiIiIiomqMySEiIiIiIiIiomqMZW4RvWtek9fxVfZERERERERUAxHnEBER
ERERERFRNcbkEBERERERERFRNcbkEBERERERERFRNcbkEBERERERERFRNcbkUAV5773340fnp7Xu80HDkMlk+OOPP
yCTyZCULAQASE1NhUwmEy9TU1N4enpi6NChuHDhgmSMmJgYSdvCy9DQUNLu+vXrCAsLg52dHQWMD0Dg4ICRI0fizp
070t+Lj4+POL5CoYCrqymzp2L/Px8AEBiYiJkMhnu379f4lj+/v7Q09PDkSNHAAA50Tnw9PTEJ598otF2/PjxcHB
wQGZmpk73GxoaKpbl5XLUqlcPQ4YMwb179yTjnjp1Cl26dIG1tTUMDQ3h60iIoKAg/Pfffzp/J0RERERERERVBZND
FSQsLax79+7F1atXNeqioqLQpEkTWfHYa027e/dupKwLITk5GXPNzsXZs2fRuHFj7NmzR9L0zMwMawlpkuvz+S5fv
oy3334bKSkpWlDuHS5evIgvK1Zgz549aNmyJe7evavz/Qwc0BBpaWk4f/48RowYgcmTJ2PhwoU69weAa9eu4fDhwx
g2bBjUajUAQKFQYPXq1YiIicGOHTvEtke0HMHixYsRExMDmzMzne4XADp27Ii0tDSkpqZilapV2Lp1Kz799F0x/ta
tW/Dz840VLRV27tyJs2fPIioqCra2tsj0zi7V/RARERERERFVBXyVfQUp3JkSEx0Dad0mieXZ2dmIi4vD3Llzi+xr
aKkJGxsbaICTkxPee+89tG/fHmFhYbh06RL09PQAADKZTGynzdChQ2fGyIBdu3bBy0jppq9br1auHpk2bokDGBpg0a
RK++eYbne7H2NhyYnGvYSGH4+eeFER8fjwkTJujUHWcIo6PrPuzXDBkyBM2aNC0SJUtGymKdC9565MmTCLHH3+Mv/
76C4aGhujfvz+GDh0KX19fsX9J9ws8TTYVtqlbty6CgoIQExMj1h86dAiZmZLYtWoV5PKnPx7169dHu3btdL4PiI
iIiIioqqE04cqiFwuR9++fRETEwNBEMTyjRs34smTj+Jdu7f0Y9WoUQMjR47E1atXcfLkSZ363L17Fzt37sSnn34q
JoYK2djYoHfv3oiLi5PEVhpGRkbIzc3Vub0gCiI0jkZISAjC3d3h6uqKDRs2iPWTJk2Cra2tuCsJACIiIsoUW6HLl
y9jx44d0NfXF8tsbGyQl5eHn376qdT3np0Tg8zMTMLFREREREREVNkx0VSBGwYgNTUVCQmJoplUVFR+0ijj1CzZs
1SjeXu7g7g6bleHTiYmQBUIKwXv78/AODChQsQBAENGzbU0l7Dhg1x79493L59u1RxFBUQYMe0Hdi5cyfat2+vc7/
du3cj0zsbAQEBAICQkBDx0TLgaTjT9erv2LhxI5YtW4bVq1drJLWku99C27Ztg1KphJGRERO0aIAZ85Idje1aNEC
Eyd0RK9evWBLZYV0nTrhiy++wL///lviPURERECLUomXvb29zvdPREREREREVFH4WfKfcnd3R6tWrRAVFQVfX19cu
nQJBw4cwK5du0o9VuEuF5LMJpaZmprijz/+kLR7PqFSmvGKExkZiVWVrVuHJkycAgD59+kgeLyUJWq1GUFCQ+ChXcH
Awxo0bh/Pnz8PNzQ3A04RVYGAg7t+/j3feeUdjDF3u19fXF9988w2ys70xatUqpKSKYPjw4ZI2c+bMwejRo7F3714
c0XIEK1aswNy5c7F//340atSoyHsIDw/H6NGjxc+ZmZLMEBEREREREVGLx51DFSwsLaybNm1CZmYmoq0j4eDgUKod
N4X0nj0L40n50IVqlKgBZ2dnyVWnTh0AgL0zM2QyGc6c0aN1vHPnzqFmzZqwsrLSaf7evXsJkSkJly5dwqNHj6BWq
2FsbKxT37t37yI+Ph6RkZGQy+WQy+WoU6c08vLyEBUVJWlbWk9NcfdbymTEBM70znjjTfw1VdfIScnBzNmzNAYy9
LSEt27d8eiRYtw9uxZ2NnZLXjAtkKhgJmZmeQiIiIiIiIiIquyYHKpgPXr0gJ6eHn744QfExsaif//+0u/WKVRQUIC
vvvok9evXR90mTXXqY2lPkiQ4d0iAyMhKPHj2S1Kwnp2Pt2rUICgrS0RAvSgVnZ2fy29uLB2Lrau3atahbt6Sk50R
lJQkXkuWLEFsbCzy8jK6Nv5pTjS2DQsXLSTnmzeLbGNgYIAGDRogKyrvcVBREREREREVFH4WfKfcnd3R6tWrRAVFQVfX19cu
5GRkYHQ0NAS+9y5cwfPkenIzs7GX3/9hSVLLuDYsWPYvn27JDEjCALs09M1+ltbW6NGjRpYvwn5WVqhYCAAMysPR
v169fH33//jXhJxqF0nTqYm2d0ed4qTp8+DVNTU0LZkyZNoFar0a1bN3h5eUnqHBwCMGHCBGzfVh1du3YtcfyS7lc
bHx8feHp6Yu7cuVi+fDm2bduG9evXo2fPnnBldYUGcNi6dSt++eUXREdHl+JuiYiIiIiIiKoGJocqgbCwMKjVavj7
+6NevXoltvz8wPw9PXxDg408PX1xcqVK+Hs7Cxp15mZCVtbW43+aWlpsLGxgYuLC06c0Ihp06cJkCgId+7cgY2ND
T744ANMmzYNFhYw5XOD/5+3t7dG2YkTJ5CcnIzvvvt0o87U1BT+/v5Qq9U6JYdKut+ijB49Gv3798eECPg4eEBY2
NjjBkzBtevX4dCoYCLiwtWrVqFPn36lBgDERERERERUVUjE8r6rnIiKlZmZiZUKhUaD18BPYVub4GXxskv+pb7mER
ERERERFR1f4empGRUapzchNmEBERERERERFRNcbkEBXrWIEDUCqVRV5EREREREREVLXsTIq1qNHj3Djxo0i658/
54j+T1m38xERERERERGVRL/D+WB1FQsIyMjJoCiIiIiIiIiIXmN8rIyIiIiIiIiIqBpjcoiIiIiIiIiIqBrjY2VEL
5n35HUv9Cp7vrKeiIiIiIiIXibuHCiIiIiIiIiIqsaYHCiIiIiIiIiIqsaYHCiIiIiIiIiIqsaYHCiIiIiIiIiIqs
aYHCpnhw4dgp6eHjp27CgpT01NhUwmEy+VSouUWLVpg69atAAAfHx9J/f0Xo60jzjH88MMP0NPTw+DBgzXqEhMTIZP
J40Xlhfz8fEmdubk5YmJixM+0jo7i/EZGRnB0dESPj2wd+9enWN5/r5NTU3h6emJoU0H4sKFC5K2MTEWu/d0NBQ
bHPr1i0MGjQI9erVg0KhgI2NDQICANd48GFJ3EuWLJGMferUKQQFBCW1hYKhQI0Dg7o0qULtm7dCkEQJLFaW1vjw
YMHkv5NmjTB90nTdb5vIiIiIiIiIoqqCyaFyFhUVheHDh+PgWY04du2aRv3u3buRlpaGo0ePolmzZggMDMRff/2FzZ
s3Iy0tDWLpaTh27JikbVpaGo4fP16qGMApH4/169cj0ztba5tLly5h9erVJY41c+ZMpKwL4fz581i9ejXMzc3h5+e
HOXPM6Bw8H/3kpycjLLz5+Ls2bNo3Lgx9uzZi2LZmYm3nPhdfXqVbE+MDAQycnJiI2NRUPKCrZs2QI0fHx/cvXu3
yLL//vLntGjRAG8fPKRbsCz0nDmDjRs34oMPPsDkyZ0RkZEhaf/gwQMSXLIwVPdHREMEREFXXvfb1KCsRxs2b
MDx48eRnp60mJgYTJ06VdLG0tISNjY2sLGxwZw5c7Bs2TIkJCRg+PdHypVhJx9L2pZGamoqDh06hE2bNiEhIQE//v
gj+vbVfBX680HDMW3aNAQHB0t25jzP1NRUjKFeVXrw9vaGra0tpk6dim7dusHNzU2nuJ69FycnJ7z33nto3749wsL
Cc0nSJejp6QEAZDJZkfd8//59HDx4EImJiWjbtI0AwMHBAC2aNSTy3qysLISFheHdd9/F5s2bxfIGDRqgWbNm+Pjj
j8WdQ4WGDx+OL7/8EkOHD0w1tbV090dERERERERUVXHnUDmKi4uDM5sb3NzcEBISgujoaI3EQ6Hc3F89913AAB9f

[illegible]

QgICMDs2bPRoUOHYUPNz8/H6tWrkZ6eLtlRk5+fD7VaDX9/f40+DR0wMCBA/H5558XeXi1NmFpnhW/g9Lo3bs3xo
8fj+nTp6Nv376S0Avt3LkTN27cEHc/PXsfu3btQqd0neDi4oKDBw8iNzcX+vr6AJ6e52Nubq7xKKAu4xUaMWTfEULJ
Sc0LECY11KYm5uTnCw8MxY8YMD0nSRWsbGxsb8byponh5ecHLywtDhw7FwYMH8b//Q/79u0Td5g9T6FQ0KFQlCpW
IiIiIiIioopWJXY0AU/P5dm6dSs0HTpU6r6+vr5ITExEYmIiFhX8xPLCR8sSEx0L/IW/kEwmG7u707KyskqC75dff
sGDBw9w6tQpyc6UjRs3Ij4+Hnfu3NHab+rUqHJSdH62nttCgoK8NVXX6F+/fpo2rSpTn0KWVhY4P3338e+ffuKfK
RMrVajZ8+eGjtsevfULSawgo0D8fDhQ0RGRpY4py7jAcDKLSSRFRWFzZs3o27duqW6r0LDhw9HjRo1sHTp0jL1f56
HhwcA6LT+RERERERERFVJldg5BACNGjVC7969sWzZMo26W7du4fHjx5IyS0tLcSeLr68vZs2ahbS0NMnZNW3btsW8
efPw4MEDSXIoKSKJ06ZNQ58+feDh4QEDAwPs27cPUVFRmDBhQomxqtVqvPvuu2jcuLgK3NPTE6NGjCkAnWswcuRIj
X61a9fG6NGj8cUXX2gd986d00hPT0d2djb++usvLFmyBME0HcP27dt1elPZ82JiYhAZGQLLS0uNutu3b2Pr1q3Ysm
ULvLy8JHX9+vXD++i9u3b6Nly5YYM2YmxowZg6tXr+Kjjz6Cvb090tLSoFarIZPJUKNGDZ3HS0LJwfDhwzF16lQ
40TkHPT1d0tbIyAgqlarEezM0NMSMGTMwd0hQrfX379/XGNvU1BQmJiYYMmQI70zs0K5d09StWxdpaWmYPXs2atWq
Jb7hjYiIiIiIi0hLUWV2DgHARFmztL4a3c3NDba2tpLr2bd3twZUnzc56233hLL33nnHeTn58PIyAjNmzcXy+vWr
QtHR0fMmDEDzZs3x5tvvomLS5dixowZMDRpUrEx/vvvv9i+fTsCAwM16mQyGT766KNiHxsbN26cxqvcC/n5+chW1h
aNGjXC559/joYNG+LPP/8scddTUyYmJlQmHgBg9erVMDExQfv27TXqfH19YWpqu+//x4ASHDhQvzwww84deoUunT
pAhcXF3Tv3h0FBQU4fPgWzMzMDb5v1apVePLkCSZPnqyxpra2tlqTakXp168fnJyctNb1799fY+zCkX0fnx+OHDmC
7t27w9XVfYGBgTA0NMSePXuK/L6IiIiIiIiIqIqZoC3bQkQvLDMzEygVCo2Hr4CewqjE9ie/6PsKoiIiIiIiIqLXV
eHvORkZGTGAZM905X5XaOURERERERER0WLYaEymDt3LpRKpdr2TduvWqenp5FxrV27doKi4uIiIiIiIiKi8+vL
YGd+/exd27d7XWGRkZoU6d0q84oqeuXr2K3NxcRXLw9eGqanpK46oeivrdj4iIiIiIiIiKisijr76FV5m1llymFhQU
sLCwq0gWNDg40FR0CEREREREREVUxfKyMiIiIiIiIiIiKgaY3KIiIiIiIiIiKga42NlRC+Z9+R1fJU9EREREREREVrc
OUREREREREREVI0xOUREREREREREVI0xOUREREREREREVI0xOUREREREREREVI0xOUTFunXrFgYNGoR69epBoVDax
sYGAQEB0Hz4MADA0dERS5Ys0eg3ffp0NGnSRFJ29+5djBo1Co60jjAwMICtrS369++Pa9euSdqFhoZCJpNBjPNBX1
8fTk50Gdt2LLKysgAAqampYr1MJkPNmjXh7e2Nffv2Scb44IMPnMacN2+eZK74+HjIZDJJmSAI+06779CyZUuYmZL
BqVTC09MTI0e0xMWLF0v7FRIRERERERFvakw0UbeCAw0RnJyM2NhYpKSKYMuWLFdx8cHdu3dLnc7du3fRokUL7N69
G5GRkbh48SLi4uJw6dIlvPP007h8+bKkfce0HZGwlobLly9j9uzZiIyMxNixYyVtdu/ejBS0N0zbtw9mZmbo3Lkzr
ly5UmQMhoaGmD9/Pu7du1dkG0EQ0KtXL4wYMQKd03fGrL2780eff+Krr76CkZERZs+eXar7JiIiIiIiIqrs+Cp7Kt
L9+/dx80BBJCYmom3btgAABwcHNGvWrNRjTzo0CTdv3sTFixdhY2MDAKhXrx527twJFxcXDB06FL/++qvYvnCXEGD
06tULCQkjiI+Pxzfffc02sbS0hI2NDWxsbdPt9+ibt262LvrFwYNGqQ1Bj8/Ply8eBERERFYsGCB1jZxcXFYv349
fv75Z7z//vtiuZ0TE9q3bw9BEEp970RERERERESVGXc0UZGUSiWUSiXi4+0Rk5NT5nEKCgqwfvl6907dw0z4FDIyM
sKnn36KnTt3FrSbycjICLm5uUXWGXsbA0CxbfT09DB37lwsW7YM//zzj9Y269atg5ubmyQx9KznH0F7VvK50DjIzMy
UXERERERERUWXH5BAVSS6XIyYmBrGxsTA3N0fr1q0xcJE/Pnnn5J2EyZMEBNJhdfcuXPf+tu3b+P+/fto2LChlnk
aNmwIQRCKPM/n2LFj+OGHH9C+fXut9VLZWQgPD4eenp64w6koH374IZo0aYJp06ZprU9JSYBm5ukNBIsQeUj91a1b
t8ixIyIioFKpMve3r7YWIiIiIiIiIqgAyaHqF1BgYG6fMmtmZgoCAACQmJuLNN99ETyEM2GbcuHFISQXSHMHD
9Z5jsJHtZ7dLbNt2ZYoUoYGHqZcuW8Pb2xrJlyT9WrVqBASCNTU2zduhUxMTFo1KhRiFPNnz8fbsGx0HPmjN
b653cHTZo0CULJSZg6dSoePnxY5Ljh4eHIyMgQr+vXr5cYcXEREREREVFF45LDVCJDQ0N06NABHTp0wNSpU/Hxxx9
j2rRpCA0NBQBYWVnB2dLZ0sfCwKl8c6latWBubl5kMubcuX0QyWRo0KCBW0br64tvvvK+vr6sL0zg76+vka/uLg4
eHh4wNzcHJawljrfj7e3NwICAjBx4kTxHqg5uLjg3LlzkRjatWqhVq1asLa2LnZchUIBhUKhcxxERERERERE1QF3D
lGpeXh4iK+V10WNGjXQ0oCp/PDD0hPT5fUPXR0CJGRkQgICJAKlExMT0Ds7AwHBwetisEAsLe3R4MGDUqVgCo0b9
48bN26FYc0HZKUBwch4/z58/j5559LPSYRERERERFRVcTEBxpzp07aNeuHdasWYM//wTV65cwcaNG7FgwQJ07dq
1VGPNmTMHNjY26NChA3799Vdcv34d+/fvR0BAAHJzc/H111+/pLvQrlGjRujdu7fGo2o9e/ZEt27d0LNNt8ycORNH
jx5Famoq9u3bh7i400jp6b3S0ImIiIiIiIeNiaHqEhKpRLNmzfH4sWL4e3tDS8vL0yZMGUDbW7E8uXLSzWWLZUVj
hw5A19fXwwaNaH0T7k0aMHnJyccPz4cTg50b2kuyjarFmzNF5NL5PJEBcXhyVLluCXX35B+/bt4ebmhgEDBsDe3h
4HDx585XESERERERERvUwy4fnfjomoXGRmZkKlUqHx8BXQUxiV2P7kF31fQVRERERERET0uir8PTQjIwNmZmY69+P
0ISiIiIiIiIiKiaozJISiIiIiIiIiKiaoyvsid6yfbPDi7Vdj4iIiIiIiKiV4k7h4iIiIiIiIiIqjEmh4iIiIiIiI
qjEmh4iIiIiIiIiIqjGeOUT0knLPXsdX2RMEREREREVLxZ1DRERERERERETVGJNDRERERERETVGJNDRERERERER
ETVGJNDRERERERERETVGJND9MrdunULgwYNQr169aBQKGBjY40AgAAcPnxYbHPo0CF07twZNWvWhKGhIRo1aoRFix
YhP29fy7YehAR07twZlpawMDY2hoeHB8aMGYmBn24AABITeYGTyXD//n2Nvm5ubjAwMBDbPsvHxweJRo0qt/smIiI
iIiIiqoyYHKJXLjYwEmnJyYnIUVKsq2bNkChX8f3L17FwDw008/oW3btqhbty4SEhJw7tw5jBw5EnPmzfEnPj0h
CII4lrrffg/Pz/Y2NHm06ZNOHPmDFasWIGmJAWSrSo2Dg0HjYIx48f03v37oiIxiMxZt0xERERERERUafFV9vRK3
b9/HwcPHkRiYiLatm0LAHBwcECzZs0AAFLZWRg4cCDef/99rFy5Uuz38ccf03bt2nj//fexYcMGBAUF4Z9//sGIES
MwYsQILF68WGzr60gIb29vrTuFnqVWq9GrVy+0bdsWQ4c0xcSJeyGTycr/pomIiIiIiIqgMe4coldKqVRCqVQipj4
e0Tk5GvW7du3CnTt3MHbsWI269957D66urli3bh0AY0PGjXjy5AnGjx+vdS5zc/Mi43jw4AE2btyIkJAQd0jQAVLZ
WUhmTCzTPRXKyclBZmam5CIiIiIiIiIiKq7JgcolDKLpcjJiYGSbGxMDc3R+vWrTFx4kT8+eefAICULBQAQMOGDbX2d
3d3F9tcuHABZmZmsLWLXUC69evh4uLcZw9PaGnp4eePXtCrVaX8a6eioiIgEqLEi97e/sXGo+IiIiIiIjoVWByiF
65wMBA3Lx5E1u2bEFAQAASExPx5ptvSs79efZcoWcJgiA++vXsn0tLrVYjJCRE/BwSEoLnmzeX+ChacCLDw5GRKSF
e169fL/NYRERERERERERK8KK0NUIQwNDdGhQwdMnTovHw4dQmhoKKNmWZV1cAwNmzZ7X203fuHFxcXAAARq6uyMjI
QPpaWqnmPnPMdI4ePYrx48dDLpdDLpejRYsWePTokfjIWLkoFAqYmZLJLiIiIiIiIqLkjskhqhQ8PDyQLZUFF39/W
FhYaH3T2JYtw3DhwgUEBwcDALp16wYDAwMsWLBa65hF7QJSq9Xw9vZGcnIykpKSxGv8+PEv/GgZERERERERUVXDt5
XRK3Xnzh10794dAwYmWbtvvaFTU10c0HECCxYsQNeuXWFiYoJvv/0WPXv2xCeffiJhw4bBzMWMe/bswbhx49CtWzf
06NEDAGBvb4/Fixdj2LBhyMzMRN++feHo6Ih//vkHq1evhlKp1Egy5ebm4vvvv8fMmTPH5eULqfv444+xYMECJCcn
o3HjxgCA27dvIykpSdL0xsYGNjY2L+9LIiIiIiIiInqFuH0IXimlUonmzZtj8eLF8Pb2hpeXF6ZMmYKBawdi+fLLA
J7uCEpISMD169fh7e0NNzc3fPnll5g0aRLWr18v0Wfo008/xa5du3Djxgl8+0GHcHd3x8cffwzZm0tbzzbsmUL7t
y5gw8//FCjzsXFBY0aNLsHvrhxx/QtGLTybVixYqX8M0QERERERERVQYJUNTJv0T0QjI2M6FSqdB4+AroKYXkBh/
yi76vICoiIiIiIiIiI6XRX+HppRkVGqc3C5c4iIiIiIiIiIqBpjcoiIiIiIiIqBrjgdREL9mF2d84rT0KXERERERFV
Wtw5RERERERERERUjTE5RERERERERERUjTE5RERERERERERUjfhMIaKXzHvy0r7KnoiIiIiIiIiCot7hwiIiIiIiIiI
qrGmBwiIiIiIiIiIqRmBwiIiIiIiIiIqRmBwiIiIiIiIiIqRmBwiIiIiIiIiIqRmByqXkJDQyGTySCTyaCvrv8nJyeMHTsWWVLYp
tPPvkEenp6WL9+vUb/6d0ni/1r1KgB0zs7907dG9evX5e08/HxEds9ew0ePFhsI5PJYghoiKtXr0r6fvDBBwgNDRX
bFhc92y4+Pr5UYxdKT0/HyJEj4ezsDENDQ9SuXRtt2rTBihUrkJ2dretXS0RERERERERFRlMDLuzXXs2BFpaWm4fPky

Zs+ejcjISiwd0xYAKJ2djb140IwbNw5qtVprf09PT6SlpeGff/5BXFwcTp8+jR49emi0GzhwINLS0iTXggULJG1kM
hmmTplaZKzP9L2yZAnMzMwKZUuXLi2yb0ljA8Dly5fRtGLT7Nq1C3PnzsWpU6ewe/dufPbZZ9i6dSt2795dbH8iIi
IiIiKiqoivsq/mFAoFbGxsAAC9evVCQKIC4uPj8c0332Djxo3w8PBAeHg4bG1tkZqaCkdHR0L/uVwu9rezs8PAgQM
xYsQIZGZmwszMTGxnbGwstivK80HDsWjRIowd0xaNgjXSqH+2v0qlgkwmK3FMXccGgE8//RRyuRwnTpyAiYmJWN6o
USMEBgZCEASd5iIiIiIiIiKqSrhzicSMjIyQm5sLAFcr1QgJCYFKpULnzp0RHR1dbN/09HRs3rwZenp60NPTK/Xcr
Vq1QpcuXRAeHl6m2F9k7Dt37mDXrL0Y0nSoJDH0LJLMVuw0tK5yMzMlFxErERERERERELR2TQyQ6duwYfvjhB7Rv3x
4XLlZakSNHEBQUBAAICQlBdHQ0CgoKJH10nz4NpVIJY2Nj2NraIjExUWuCJTiyEkqlUnLFxsZqxBAREYEd03bgwIE
D5X5/xY198eJFCIIANzc3SbmVLZUY74QJE0ocX6VSiZe9vX25xk9ERERERET0MjA5VM1t27YNSqUShoaGaNmyJby9
vbFs2TKo1WoEBATAYsoKANC5c2dkZWVpnLvJ5uaGpKQKHD9+HHPmzEGTJk0wZ84cjXl69+6NpKQkyfXhX9qtPPw8
EDfvn1LTMSUh55jP7876NixY0hKSoKnpdydcnKKHT88PBwZGRni9fzB3ERERERERESVEc8cquZ8fX3xzTffQF9fH3
Z2dtDX10d+fj5Wr16N9PR0yOX/91ckPz8farUa/v7+YpmBgQGcnZ0BPD2c+sKFCxgyZAi+/57yTwqlUpsV5IZM2b
A1dVV8sax8lLU2M70zpDJZDh37pyk3MnJCcDTx+1KolAooFAoyi1WIiIiIiIioleB04eq0RMTEzg708PBwQH6+voA
gF9++QUPhjzAqV0nJDt9Nm7ciPj4eNy5c6fI8aZMmYJ169bhjz/+KHNM9vb2GDZsGCZ0nIj8/Pwyj10asS0tLdGhQ
wcsX74cWVLZ5TonERERERERUWGX5BBpUKvVePdd9G4cWN4eXmJV2BgIGrVqoUla9YU2dfJyQldu3bVeG18dnY20t
PTJde9e/eKHCC8PBw3b958Ka+PL2rsyMhI50Xl4e2330ZcXBz0nj2L8+fPY82aNTh37lyZDtkmIiIiIiIiquyYHCK
Jf//9F9u3b0dgYKBGnUwmw0cfffQ5lW13sGGPGjMH27dtx90hRsey7776Dra2t5Ao0Di5yDAsLC0yYAGPHZ8u+82U
cuwGDRrg1KLt8PPzQ3h40Bo3boy3334by5Ytw9ixYzFr1qxjy4WIiIiIiIiooskEQRAQ0gi1lFmZiZUKhUaD18BP
UXJZxad/KLvK4iKiIiIiIiIXLeFv4dmZGTazMxM537c0UREREREREREVI0x0UREREREREREVI3xVfZEL9n+2cGL2s
5HRERERERE9Cpx5xARERERERERUTXG5BARERERERERUTXG5BARERERERERUTXGM4eIXjLvyeskr7LnK+uJiIiIiIi
oMuH0ISiIiIiIiIiKiaozJISiIiIiIiIiKiaozJISiIiIiIiIiKiaoxaJiC0HT0EPT09d0zYUVKe
mJgImUyG+/fva/Rp0qQJpk+fLrYp7oqJiQEA50fnY/HixXjjjTdgagGic3Nzd0rUCb///nupY3706BFq1qJcwsLP
Hr0SKPe0dERMpKMR44ckZSPGjUKPj4+4ufp06ELccrlclhZwChb2xtLlixBTk60TrE0atQIH3/8sda6devWQV9fH/
/+2+x31V6eroYT5MmTTTGSU1NhUwmQ1JSktbPhTz2t2g0fHx+oVCooolUq88cYbmDlzJu7evQsAiImJgbm5eZH3Eho
aqjW+Z/9unDp1Cl26dIG1tTUMDQ3h60iIoKAg/Pfffz9X0ERERERERERVSbVIDkVFRWH480E4ePAgrl27Vqq+rVq1
QLpamnj16NEDHT2tLJQFBQVBEAT07NkTM2f0xIgRI3D27Fns27cP9vb28PHxQXx8fKnm3bRpE7y8vODh4YHnmzdrb
WNoaIgJEyaU0JanpyfS0tJw7do1JCQkoHv37oiIiECrVq3w4MGDEvuHhYVhw4YNyM701qiLiopCly5dULt2bbHs/P
nzku8nLS0N1tbWJc5TkkmTJiEoKajvPM0fv31V/z1119YtGgRkp0T8f333+s8zvPrL5aWhnXr1gEAbt26BT8/P1h
ZWWhnzp04e/YsoqKiYGrq/X+iYiIiIiIiKq61/5V9llZwdiwYQ00Hz+09PR0xMTEY0rUqTr3NzAwgI2NjJjZyMgI
0Tk5kjIAiIuLw48//ogtW7bgvfFe8tXrlyJ03fu400PP0aHDhlgYmKi07xqtRohISEQBAFqtRq9e/fwaDNo0CB88
803+0WXX9c5+cix5LL5WK8dnZ2aNSoETp06IDGjRtj/vz5mD17drGx90nTBxMmTMDGjRvRr18/sfzatWvYu3cvfV
75Z0L7a2vYnYfIMWxY8cWd+5cLFmyBCNHjTLHR0d0aDUE627v4qiUCg01q/Qu0UHkMjZiVWvKuf/rjU9b+6bR
r1+6F4iciIiIiIiKqRf77nUNXcXfWc30DM5sb0KJCEB0dFUEQyn2eH374Aa6urpLEUKEyX8bgzP07+02333Qa69Kl
Szh8+DB690iBHj164NqrQ07h8+bJG00dHRwwePBjh4eEoKCGoVbzu7u7o1KLtKbuSnmVpaYmuXbsi0jpaUh4dHY3at
WujU6d0pZq7LNUXQuLuoLPP/1Ua315JaNsBgyQl5eHn376qdR/T3JycpCZmSm5iIiIiIiIiCq71z45VLgDB3j60N
HDhw+xZ8+ecp8nJSUFDrs21FpXWJ6SkqLTwFFRUejUqZN45LDHjh0RFRWlTe3kyZNx5coVrF27ttQxu7u7IzU1Vae
2AwYMwP79+8UklSAiImJQWhoKPT09CRT69atC6VSKV5ubm6S+t0nT0vqlUoLPD09i53/woULcHJygr6+vu43WIRt
27Zpzd9r1iwaQISwLTBx4kT06tULVLZw6NSpE7744gv8+++JY4bEREbLUoLXvb29i8cKxEREREREdHL9lonh86fP
49jx46hZ8+eAJ4+XhUUFFRkouVlk8lkJbbJz89HbGysmNACgJCQEMTGxiI/P1+jfa1atTB27FhMnT0VT548KVU8gi
DoFBMA+Pv7o27duuLuob179yI1NRX9+/fXaHvgwAEKJSWJ186d0yX1bm5ukvqkpCT88ssv5RzRSXx9fTXmHzp0qFg
/Z84cpKenY8WKFfDw8MCKFSvg7u6006dPFztueHg4MjIyx0v69evLEi8ERERERERHRy/RanzmkVquRl5eH0nXqiGWC
IEbfXx/37t2DmZkZACAjI0PjsaT79+9DpVLpPJerqyv0nDmjte7s2bMAABcXlXh2bLzJ27cuIGgoCBJeX5+Pnbt2
qX1Ea7Ro0cjMjISkZGR0sdbGFF9+vV1alujRg2EhoYiJiYGM2bMQHR0NLY9vbXeU/369Yt9zMvAwAD0zs6SssLzfY
ri6uqKgwcPIjc394V3D5mYmGjM/zxLS0t0795dPLy7ad0mWlhwIWJyY4vso1AooFAoXig2IiIiIiIiIolfttd05LJe
Xh9WrV2PRokWShSLJyclwCHDA2rVr4eLigholauD48e0Svmlpabhx44bG41DF6dmzJy5cuICtW7dq1ClatAiWlpbo
0KFDie0o1Wr07NLTY2dL7969oVartfZRPkPwYmMUK5syZo/M5N+f0nc00HTsQGBioU3sA6N+/P/755x9s3rwZmzdvr
lhYmM59X1SvXr3w80HDiHNgpTmQurQMDA4QoEEDZGVlvb05iIiIiIiIiIiCrKa7tzaNu2bbh37x7Cws10dYbL69YNar
Uaw4Y96BBgzBmZBjI5XI0btwYN2/exKJk9CkYUYP4+vrPF/Pnj3Ft3l98cUXaNa++PTIj8/H1119j5Yt2LhXy4l
vKrt9+za2b2KLvU2wMvL5L1LXr18/vPvuW7h9+zZq1aql0feTTz7B4sWLsW7d0jRv3lXsL5eXh/T0dBUQF0DhnTtI
TEzE7Nmz0aRJE4wbN07neyx8a9cnn3wCfX19d0vWTWu7W7du4fHjx5IyS0vLF9rx07x5c4wfPx5jxozBjRs380GHH
8L0zg4XL17EihUr0KZNG/EtZvn5+UHKSpL0NzAwgIeHB4CnB0enp6dL6uVy0aysrLbt2zasX78ePxv2hKurKwRBwN
atW/HLL79oHMHNRERERERE9Dp4bZNDarUafn5+Wh8NCwwMxNy5c/HHH39g8eLfsLW1xcSJE5Gamgpra2v4+vpi/fr
1JT7q9CyZTIYNGZg6dKLWLx4MYyOHQqFQoGwLVsiSEBbdq0KXGM1atXw8TEB03bt9eo8/X1hampKb7//nuMHj1a
o15fXx+zZs1Cr169N0r+/vtv2NraQk9PDyqVCh4eHggPD8eQIUNK/RhUWFgY9uzZg08++QTGsZa22jbcXX48GG0a
NGiVHM9b/78+Xjrrbfw9ddfY8WKFSGoKECDBg3QrVs390vXT2z380FDNG3aVNLXwcfBPHx7x44dsLW11Yj53LlZ8P
DwgLGxMcaMGYPr169DoVDAxcUFqlatQp8+fV4ofiIiIiIiIiIqLKSCa8jPe6ExEyMz0hUqnQePgK6CmMxPKTX/StwKi
IiIiIiIjodVX4e2hGrOZ4zrIuXtszh4iIiIiIiIiIqGRMDr1inp6eUCqVWq+1a9dWSEwHDhwoMiaLUlkhMRERERER
ERHRq8HHyl6xqlEvIjc3V2td7dq1Ywpp+oojAh49eoQbN24UWV/Sa99Ju7Ju5yMiIiIiIiIiIqi7L+HvraHkhDWTk40
FR0CBqMjIyYAHoJcV0umZmZFRwJERERERERVQeFv3+wdh8Qk0NEL8md03cAAPb29hUcCREREREREVUnDx480Pr29q
IwOUT0klhYWAAARl27VqofSqP8MjMzYw9vj+vXr/MRwSq0a/n64Fq+PriWrw+u5euDa/n64Fq+PnRdS0EQ80DBA9j
Z2ZVqfCaHiF6SGjWenveuUqn4P8SvCTMz67l4Jr+fRgWr4+uJavD67l64Nr+fRgWr4+dFnLsmx04NvKiIiIiIiIi
iIiqMSaHiIiIiIiIiIiIqMSaHiF4ShUKBad0mQaFQVH0o9IK4lq8PruXrg2v5+uBavj64lq8PruXrg2v5+njZaykTS
vt+MyIiIiIiIiIiIemlw5xARERERERERUTXG5BARERERERERUTXG5BARERERERERUTXG5BARERERERUTXG5BDRSx
AZGyn69evD0NAQb731Fg4coFDRIVEJiIi8M4778DU1BTW1tb44IMPcP78eUkbQRAwffp02NnZwcjICD4+PgV7778
rKGLSRUREBGQyGUaNGiVWwC2rLhs3biAkJASwLpYwNjZGkyZNcPLkSbGe61k150XLYfLkyahfvz6MjIzg50SEmTnn
oqCgQGzDtayc9u/fj/feew92dnaQyWSiJ4+X10uybjk50Rg+fDisrKxgYmKC999/H//8888rvAsCil/L3NxcTJgwA
Y0aNYKJiQns70zQt29f3Lx5UzIG17JyK0nn8lMDBg2CTCbDkiVLJ0Vcy8pBl7U8e/Ys3n//fahUKpiamqJFixa4du
2aWF9ea8nKEFE5i4uLw6hRozBp0iScOnUK//vf/9CpUyfJDzBVPvv27cPQoUNx5MgR/Pbbb8jLy40/vz+ysrLEngs


```

HH+55Tq+Xq6iqXl5ep1+uZz+ff+snrdwaDQYbDYer1ep6fnz0dTj/e0VldXc1sNsv7+3u63W7W19dzcKScrm8EG7
8iePj4/T7/fT7/WxsbOTx8TH39/epVqv/7CyVSiU3NzcfX8wPBo0cn58vXb05uZnr6+uMRqM0Go08PT3l9PT0y/kv
Ly95eHjIzs70L20lUim9Xm+htazT6aRarabVamV3dzfb29s50ztbWLe3t5e3t7c0m80cHh7m60goBwcHSZKVlZXc3
t6m3W6nVqtlPB5nMplkbW3tGzcDAMuVfvxNozUAALDU/v5+Xl9fc3d39+Wcra2tNBqNXFxc/Ld9AcBnKocAAAAACK
w4BAAAAFBg2soAAAAACKzLEAAAAECBCYcAAAAACKw4BAAAAFBgwiEAAACAahMOAQAAABSYcAgAAACgwIRDAAAAAAU
mHAIAAAAsJ/JkYPTbGa9wAAAAABJRu5ErkJggg==",
  "text/plain": [
    "<Figure size 1200x800 with 1 Axes>"
  ],
  "metadata": {},
  "output_type": "display_data"
},
{
  "source": [
    "paid_apps = df3[df3['Type'] == 0]\n",
    "plt.figure(figsize=(12, 8))\n",
    "sns.countplot(y='Category', data=paid_apps,\n",
    "order=paid_apps['Category'].value_counts().index)\n",
    "plt.title('Number of Paid Apps per Category')\n",
    "plt.ylabel('Category')\n",
    "plt.xlabel('Number of Paid Apps')\n",
    "plt.show()"
  ],
  "metadata": {
    "kernel_spec": {
      "display_name": "Python 3 (ipykernel)",
      "language": "python",
      "name": "python3"
    },
    "language_info": {
      "codemirror_mode": {
        "name": "ipython",
        "version": 3
      },
      "file_extension": ".py",
      "mimetype": "text/x-python",
      "name": "python",
      "nbconvert_exporter": "python",
      "pygments_lexer": "ipython3",
      "version": "3.11.7"
    }
  },
  "nbformat": 4,
  "nbformat_minor": 5
}

```