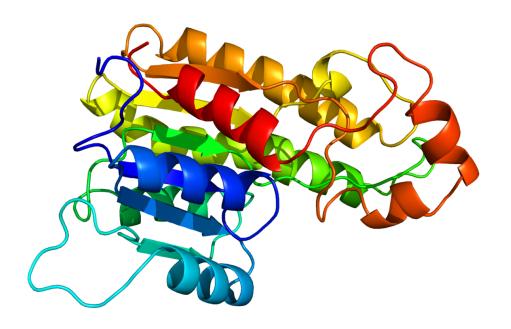
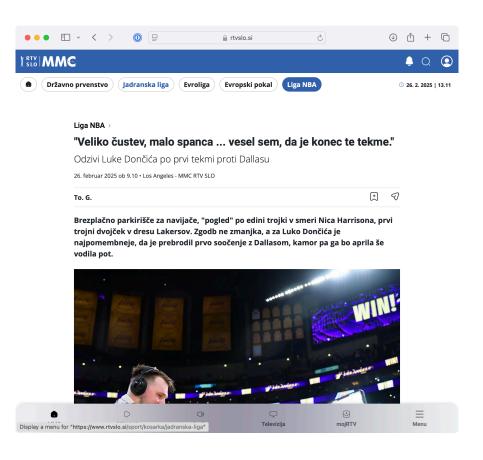
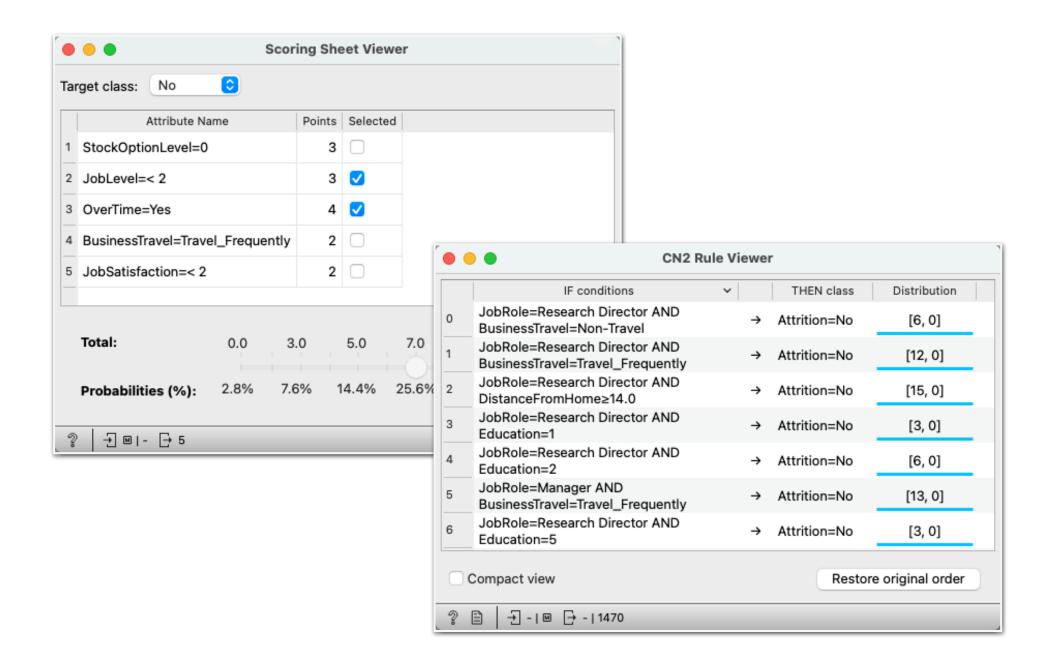


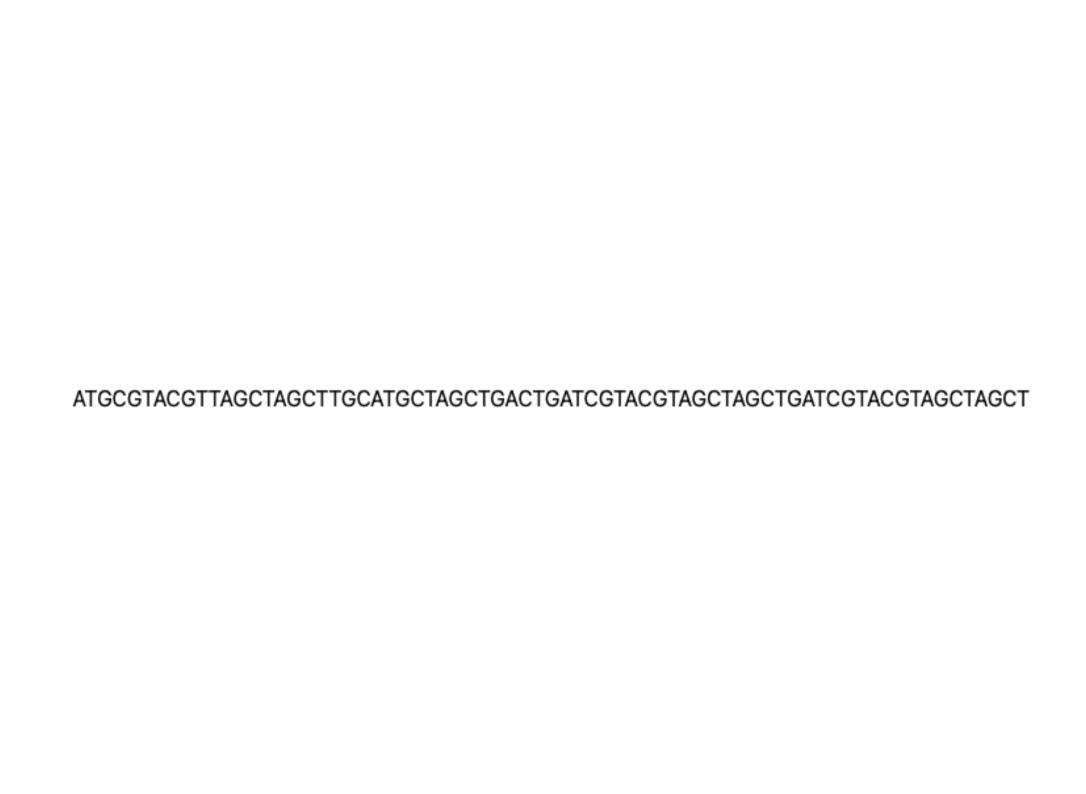
Podatki





ID pacienta	Starost	Spol	Krvni tlak (mmHg)	Holesterol (mg/dL)	Sladkorna bolezen (Da/Ne)
P001	45	М	130/85	210	Ne
P002	52	Ž	140/90	250	Da
P003	37	М	125/80	190	Ne
P004	60	Ž	160/95	280	Da





 $C_9H_8O_4$

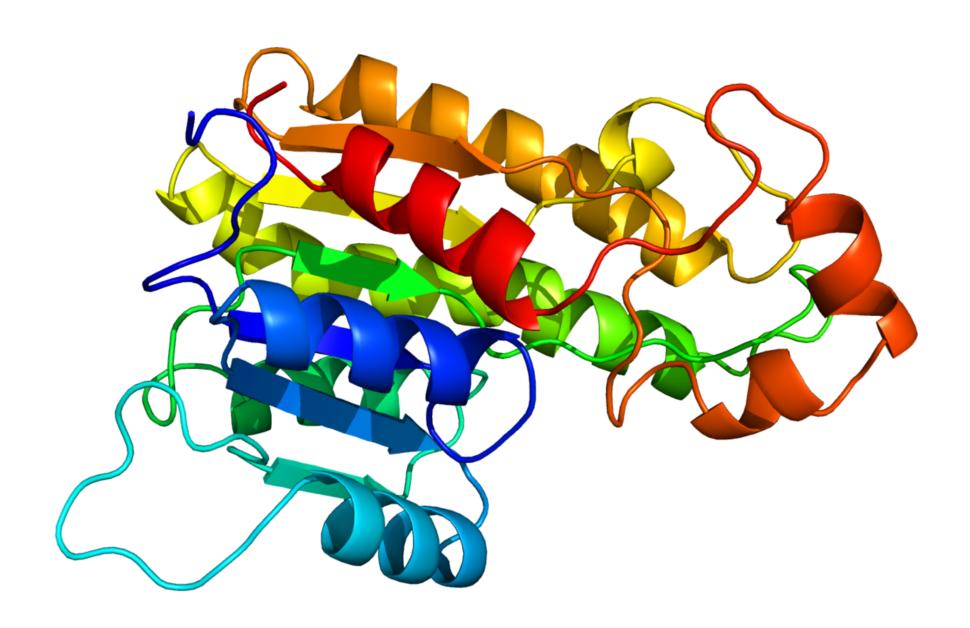
C₉H₈O₄
CC(=0)OcIcccccIC(=0)O

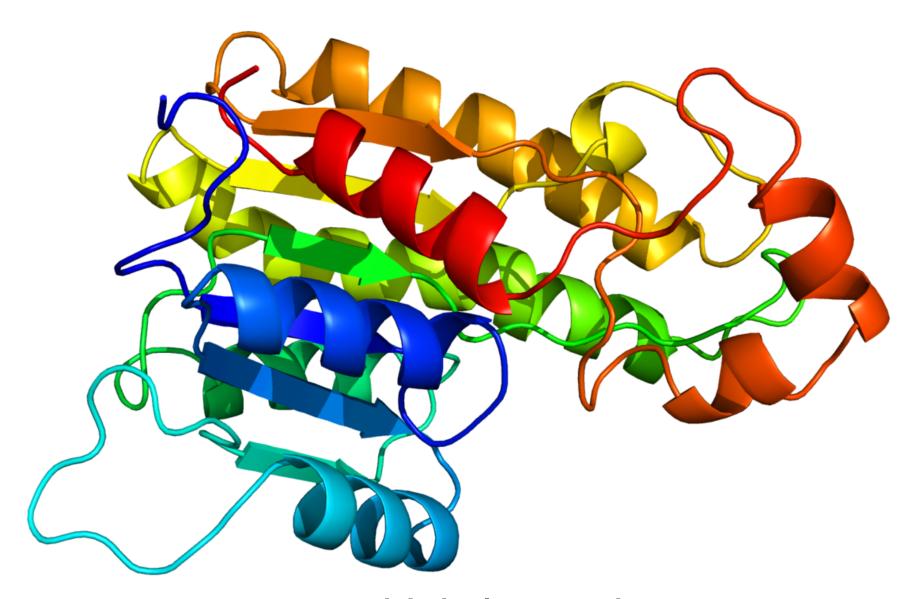
$C_9H_8O_4$ CC(=0)OcIcccccIC(=0)O

```
from rdkit import Chem
from rdkit.Chem import AllChem

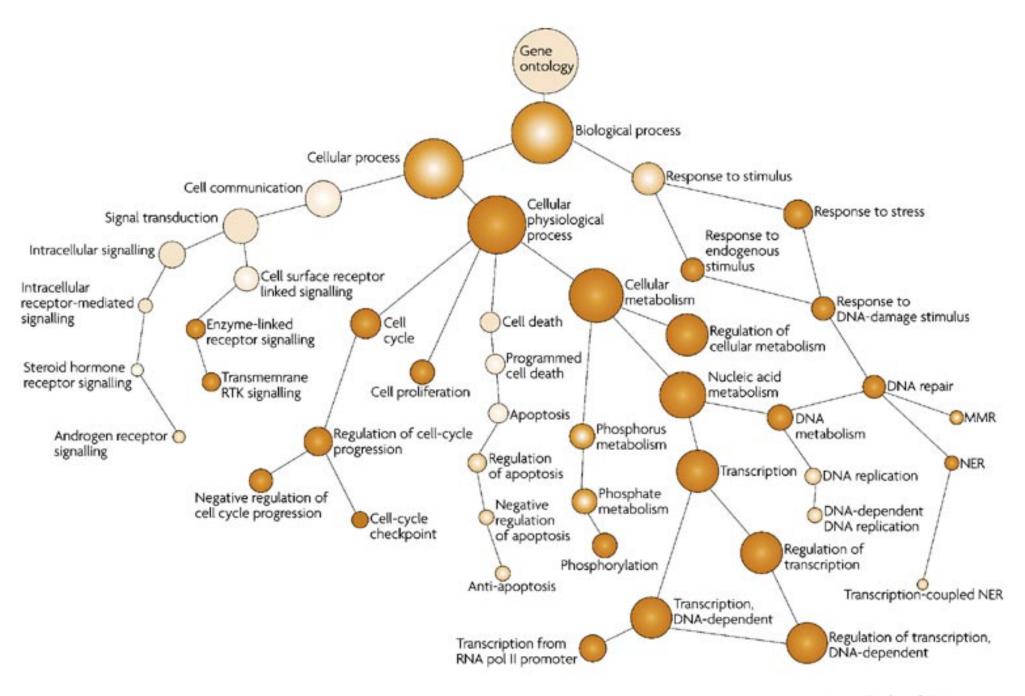
smiles = "CC(=0)0c1ccccc1C(=0)0" # Aspirin
mol = Chem.MolFromSmiles(smiles)
fp = AllChem.GetMorganFingerprintAsBitVect(mol, radius=2, nBits=1024)

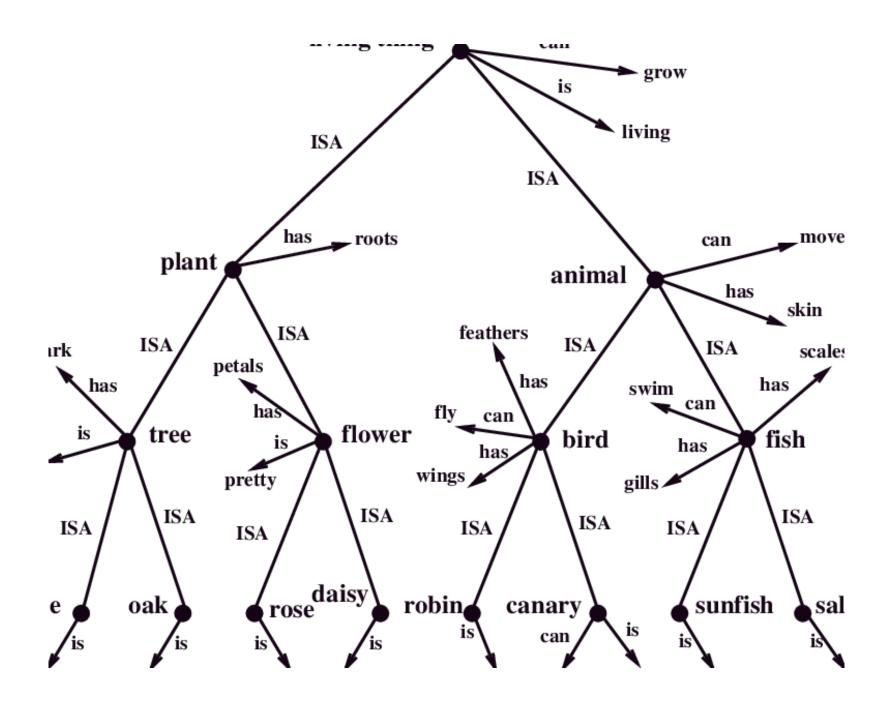
print(fp.ToBitString()) # Prikaz 1024-bitnega vektorja
```

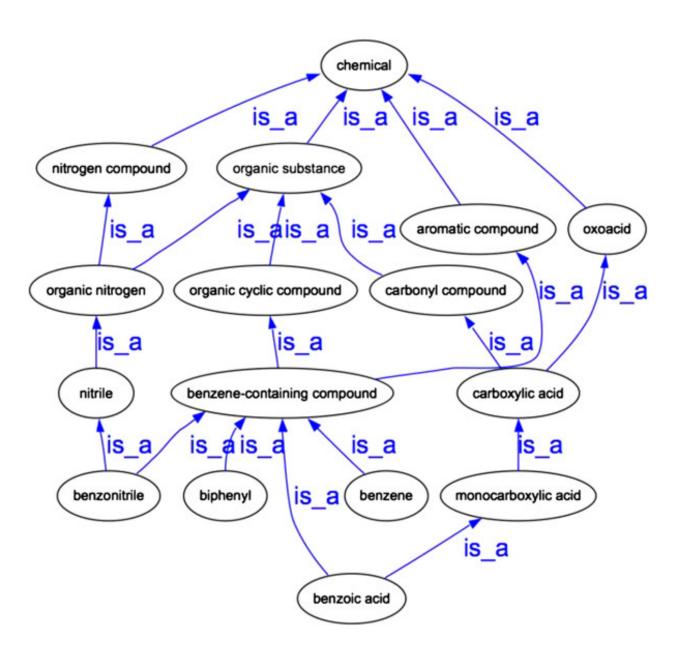




Nobelova za kemijo: David Baker, Demis Hassabis, and John Jumper







Aspirin Classification in ChEBI Ontology

ChEBI ID: CHEBI:15365

IUPAC Name: 2-acetoxybenzoic acid

Molecular Formula: C₉H₈O₄

SMILES: CC(=0)0c1ccccc1C(=0)0

Hierarchy in ChEBI Ontology:

1. Organic Compounds (CHEBI:50860)

- Benzoates (CHEBI:38147) → Contains a benzoic acid core
- Salicylates (CHEBI:35475) → A derivative of salicylic acid
- Aspirin (CHEBI:15365) → An acetylated derivative of salicylic acid

Functional Classification:

- Nonsteroidal Anti-inflammatory Drug (NSAID)
- Acetylsalicylic acid derivative
- Antipyretic agent (fever reducer)
- Analgesic (pain reliever)
- Platelet aggregation inhibitor (used for cardiovascular disease prevention)

- a. ∀x: food(x) → likes(John, x)
- b. food(Apple) ∧ food(vegetables)
- c. ∀x ∀y: eats(x, y) ∧ ¬ killed(x) → food(y)
- d. eats (Anil, Peanuts) Λ alive(Anil).
- e. ∀x : eats(Anil, x) → eats(Harry, x)
- f. $\forall x: \neg killed(x) \rightarrow alive(x)$ added predicates. g. $\forall x: alive(x) \rightarrow \neg killed(x)$
- h. likes(John, Peanuts)

Definition:

Expected Years of Schooling represents the number of years a child of school-entry age is expected to attend school if current enrollment patterns persist. It reflects the future educational opportunities available to a child in a given country.

Role in HDI:

This indicator is used to measure **educational attainment**, one of the three dimensions of the HDI (along with life expectancy and income). It provides insights into how much **formal education** individuals are likely to receive over their lifetime.

- Difference from "Mean Years of Schooling" (MYS):
 - Expected Years of Schooling (EYS) looks forward (future educational prospects).
 - Mean Years of Schooling (MYS) looks backward (the average number of years of education already completed by adults aged 25+).

Why is it important?

- It predicts human capital development and long-term socio-economic progress.
- Higher values suggest better access to education and greater future workforce skills.
- It helps compare education policies and investment in schooling across countries.

