

Days	Names	Duration	Category	Main Category
1	Introduction to National Center of Biotechnology Information (NCBI)	18:01	NCBI	Bioinformatics Databases
2	Sequence Analysis	17:59	NCBI	Bioinformatics Databases
3	Sequence Retrieval from NCBI	16:16	NCBI	Bioinformatics Databases
4	PubMed Central & ENTREZ	11:06	NCBI	Bioinformatics Databases
5	FASTA (Sequence Format)	6:13	Sequence Format	Bioinformatics File Formats
6	GenBank: Nucleotide Database on NCBI	6:50	NCBI	Bioinformatics Databases
7	GenBank (Sequence Annotation Format)	7:08	Sequence Format	Bioinformatics File Formats
8	FASTA vs. GenBank	18:26	NCBI	Bioinformatics Databases
9	Gene Database: A Comprehensive Gene Database	30:21:00	NCBI	Bioinformatics Databases
10	NCBI Genomes & NCBI Assembly: Retrieval of Genomes	36:14:00	NCBI	Bioinformatics Databases
11	Gene File Format/Gene Transfer Format	11:06	Sequence Format	Bioinformatics File Formats
12	BED (Gene Structure Format)	4:26	Sequence Format	Bioinformatics File Formats
13	RefSeq Database: Retrieval of Single Reference Sequences	11:15	NCBI	Bioinformatics Databases
14	BLAST Database Searching	25:36:00	NCBI	Bioinformatics Databases
15	Introduction to Molecular Modeling Database (MMDB)	8:06	NCBI	Protein Databases & Analysis
16	Introduction to UCSC Genome Browser & SARS-CoV-2 Viral Genome	13:40	UCSC	Bioinformatics Databases

17	Retrieve an Entire Genome & Retrieval of SARS-CoV-2 Viral Genome	9:40	UCSC	Bioinformatics Databases
18	Retrieval of Genomic Data & Annotation of SARS-CoV-2 Viral Genome	5:29	UCSC	Bioinformatics Databases
19	Introduction to UniProt	9:56	UniProt	Protein Databases & Analysis
20	UniProtKB & Protein Analysis	39:29:00	UniProt	Protein Databases & Analysis
21	Introduction to Protein Data Bank (PDB)	6:44	PDB	Protein Databases & Analysis
22	Accurately Searching for a Protein Structure on PDB & Protein Analysis	13:55	PDB	Protein Databases & Analysis
23	Introduction to ENSEMBL	7:49	ENSEMBL	Bioinformatics Databases
24	Retrieval of a Gene-Protein-Chromosomal Region	18:01	ENSEMBL	Bioinformatics Databases
25	Introduction to InterPro	4:10	InterPro	Protein Databases & Analysis
26	InterPro - Protein Family Classification and Analysis	14:35	InterPro	Protein Databases & Analysis
27	Introducton to Phytozome	9:38	Phytozome	Bioinformatics Databases
28	Interpret Plant Genome Records	9:06	Phytozome	Bioinformatics Databases
29	Download an Entire Plant Genome & Proteome	26:41:00	Phytozome	Bioinformatics Databases
30	EMBOSS NEEDLE: Global Alignment of Sequences	20:02	Pairwise Sequence Alignment & Analysis	Sequence Alignment & Analysis
31	EMBOSS Water	9:10	Pairwise Sequence Alignment & Analysis	Sequence Alignment & Analysis

32	Clustal Omega: Most Reliable Multiple Sequence Alignment Tool	19:18	Multiple Sequence Alignment & Analysis	Sequence Alignment & Analysis
33	Clustal Omega Alignment Format	5:07	Alignment Format	Bioinformatics File Formats
34	Jalview	13:42	Multiple Sequence Alignment & Analysis	Sequence Alignment & Analysis
35	MEGA - Multiple Sequence Alignment	4:23	Multiple Sequence Alignment & Analysis	Sequence Alignment & Analysis
36	MEGA (Alignment Format)	5:32	Alignment Format	Bioinformatics File Formats
37	iTOL: Creating Publishable Phylogenetic Figures	13:42	Phylogenetic Tree Building & Visualization	Phylogenetic Analysis
38	Quick2D	4:33	Secondary Structure Prediction	Secondary Structure Prediction
39	Jpred: Prediction Secondary Structure of the Proteins	4:54	Secondary Structure Prediction	Secondary Structure Prediction
40	HMMER - Hidden Markov Model Based Protein Profiles Database	13:16	Protein Analysis	Protein Databases & Analysis
41	SignalP: Prediction of Signal Peptides	7:57	Protein Analysis	Protein Databases & Analysis
42	TargetP: Prediction of Protein Localization	9:21	Protein Analysis	Protein Databases & Analysis
43	Gene Structure Display Server 2.0	8:35	Genomics Tools	Genomics Tools
44	Introduction to Python and its Intallation	8:25	Introduction	Python
45	Comments	5:42	Introduction	Python
46	Basic Input and Output	15:37	Introduction	Python
47	Mathematical Operations	7:20	Introduction	Python
48	Strings	21:51	Iterable Objects	Python
49	Dictionaries	10:57	Iterable Objects	Python

50	Lists	28:47:00	Iterable Objects	Python
51	Tuples	10:37:00	Iterable Objects	Python
52	Sets	7:35	Iterable Objects	Python
53	If-Else	9:19	Control Flow	Python
54	For Loop and Calculation of Molecular Weight of Proteins	10:56	Control Flow	Python
55	While Loop and Biological Data Analysis	9:37	Control Flow	Python
56	Reading Files	13:45	File Handling	Python
57	Writing Files	7:17	File Handling	Python
58	Consolidate(merge) multiple DNA and Protein Sequences into one FASTA file	9:24	File Handling	Python
59	OS	31:47:00	File Handling	Python
60	CSV (A special kind of file in Bioinformatics)	8:41	File Handling	Python
61	Function	26:41:00	Functions & Modules	Python
62	With	8:50	Functions & Modules	Python
63	Error Handling	15:31	Error Handling	Python