Performance comparison is return comparison:

Crisis period: 12/31/2019 to 3/31/2020

Post crisis period: 3/31/2020 to 11/11/2020

Crisis Return Cal: (Price at 3/31/2020 / price at 12/31/2019) - 1

Post Crisis Return Cal: Price at 11/11/2020 / Price at 3/31/2020) - 1

Question 1:

rank 11 sectors performance by descending order: crisis, post crisis, and total period.

Fill in the form below:

Crisis Period:

|  |  |
| --- | --- |
| XLK | -0.1186902 |
| XLV | -0.1261544 |
| XLP | -0.130169 |
| XLU | -0.1339411 |
| XLC | -0.1727644 |
| XLRE | -0.192338 |
| SPY | -0.1944769 |
| XLY | -0.2141931 |
| XLB | -0.2617887 |
| XLI | -0.2700607 |
| XLF | -0.3178511 |
| XLE | -0.5051587 |

Post Crisis Period:

|  |  |
| --- | --- |
| XLY | 0.5674287 |
| XLB | 0.5543711 |
| XLK | 0.5162813 |
| XLI | 0.4502308 |
| XLC | 0.44197637 |
| SPY | 0.3954358 |
| XLF | 0.31422493 |
| XLV | 0.26489642 |
| XLP | 0.2430928 |
| XLU | 0.22075553 |
| XLRE | 0.21160935 |
| XLE | 0.19669814 |

Total Period (12/31/2019 to 11/11/2020)

|  |  |
| --- | --- |
| Ticker | Rate |
| XLK | 0.33631352 |
| XLY | 0.23169623 |
| XLC | 0.19285414 |
| XLB | 0.14745435 |
| SPY | 0.12405576 |
| XLV | 0.10532421 |
| XLP | 0.08128065 |
| XLI | 0.05858045 |
| XLU | 0.05724625 |
| XLRE | -0.0214292 |
| XLF | -0.1035029 |
| XLE | -0.4078244 |

Question 2:

In crisis and post crisis period, the best performer and worst performer in each sector:

Fill the form and write your sql queries below:

Crisis period (12/31/2019~ 3/31/2020)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sectors | Best Performer Name | Best performer Return | Worst Performer Name | Worst Performer Return | Discrepancy  (BstPerfor Ret-WstPerfor Ret) |
| Consumer Disc. | DPZ | 0.10569693 | NCLH | -0.8123609 | 0.91805783 |
| Consumer Stpls. | CLX | 0.1358976 | SYY | -0.4637442 | 0.5996418 |
| Enrgy | COG | -0.0061957054 | APA | -0.83539534 | 0.8291996346 |
| Financials | MSCI | 0.12151554 | CMA | -0.5836352 | 0.70515074 |
| HealthCare | REGN | 0.3004421 | HCA | -0.39006573 | 0.69050783 |
| Info Tech | CTXS | 0.28044453 | DXC | -0.6459748 | 0.92641933 |
| Industrials | ROL | 0.093202874 | UAL | -0.64184356 | 0.735046434 |
| Materials | NEM | 0.045059357 | MOS | -0.49852595 | 0.543585307 |
| Communication Services | NFLX | 0.16049075 | VIAC | - 0.66115147 | 0.82164222 |
| Real Estate | DLR | 0.1692329 | SPG | -0.6260708 | 0.7953037 |
| Utilities | NEE | -0.0011701094 | CNP | -0.42731047 | 0.4261403606 |

Post Crisis period (3/31/2020~ 11/11/2020)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sectors | Best Performer Name | Best performer Return | Worst Performer Name | Worst Performer Return | Discrepancy  (BstPerfor Ret-WstPerfor Ret) |
| Consumer Disc. | ETSY | 2.3972425 | TIF | 0.024722166 | 2.372520334 |
| Consumer Stpls. | EL | 0.5613268 | WBA | -0.07340897 | 0.63473577 |
| Enrgy | APA | 1.3980559 | HFC | -0.108817786 | 1.506873686 |
| Financials | SIVB | 1.1764628 | WFC | -0.13251331 | 1.30897611 |
| HealthCare | ALGN | 1.654671 | BIIB | -0.22868071 | 1.88335171 |
| Info Tech | QCOM | 1.2118292 | CTXS | -0.18421462 | 1.39604382 |
| Industrials | FDX | 1.2255049 | HII | -0.12241523 | 1.34792013 |
| Materials | FCX | 1.8933334 | IFF | 0.08321086 | 1.81012254 |
| Communication Services | VIAC | 1.173418 | T | 0.039110277 | 1.134307723 |
| Real Estate | VTR | 0.84906393 | EQR | -0.013251078 | 0.862315008 |
| Utilities | AES | 0.60782313 | FE | -0.22892906 | 0.83675219 |

SQL queries below:

Select \* from ETF\_TABLE order by Rate ASC/DESC;

select \* from THE\_TABLE rc where rc.Ticker in (select VIEW.Ticker from VIEW) order by Rate Desc/Asc limit 1;