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: Post Crisis Period:

|  |  |
| --- | --- |
| **Sector Name** | **Post Crisis Period Performance (%)** |
| Consumer Discretionary | 56.7429 |
| Materials | 55.4371 |
| Info Tech | 51.6281 |
| Industrials | 45.0231 |
| Communication Services | 44.1976 |
| EquityIndex | 39.5463 |
| Financials | 31.4225 |
| Health Care | 26.4896 |
| Consumer Staples | 24.3093 |
| Utilities | 22.0756 |
| Real Estate | 21.1609 |
| Energy | 19.6698 |

|  |  |
| --- | --- |
| **Sector Name** | **Crisis Period Performance (%)** |
| Info Tech | -11.869 |
| Health Care | -12.615 |
| Consumer Staples | -13.017 |
| Utilities | -13.394 |
| Communication Services | -17.276 |
| Real Estate | -19.234 |
| Equity Index | -19.448 |
| Consumer Discretionary | -21.419 |
| Materials | -26.179 |
| Industrials | -27.006 |
| Financials | -31.785 |
| Energy | -50.516 |

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

|  |  |
| --- | --- |
| Sector Name | Tot Ret |
| XLK | 0.336314 |
| XLY | 0.231696 |
| XLC | 0.192854 |
| XLB | 0.147454 |
| SPY | 0.124056 |
| XLV | 0.105324 |
| XLP | 0.081281 |
| XLI | 0.05858 |
| XLU | 0.057246 |
| XLRE | -0.02143 |
| XLF | -0.1035 |
| XLE | -0.40782 |

Question 2:

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 |
| Energy | 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 |
| Industrials | CTXS | 0.28044453 | DXC | -0.6459748 | 0.92641933 |
| Info Tech | 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 |
| Energy | 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 |
| Industrials | QCOM | 1.2118292 | CTXS | -0.18421462 | 1.39604382 |
| Info Tech | 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:

Crisis period return

SELECT one.ticker, (two.price/ one.price) as cpreturn

FROM (( SELECT ticker, price

FROM datamap

WHERE Date=20191231 ) AS one,

(SELECT ticker, price

FROM datamap

WHERE Date=20200331 ) AS two)

WHERE one.ticker=two.ticker