### 0.9 2a Cryptopunks Historical transactions

[13]:
```
# Quering the API for transaction data
cryptopunks_tx_url = url + chain_id + "/address" + cryptopunks_address +␣
 ↪page_option + api_option
cryptopunks_tx = requests.get(cryptopunks_tx_url).json()

# Convert transactions data to dataframe
cryptopunks_tx_df = pd.DataFrame(cryptopunks_tx['data']['items'], columns =␣
 ↪['to_address_label','fees_paid', 'value_quote','block_signed_at']).
 ↪set_index('block_signed_at').sort_index()

cryptopunks_tx_df.head()
```

[13]:

| block_signed_at | to_address_label | fees_paid | value_quote |
|---|---|---|---|
| 2022-04-27T17:46:26Z | CRYPTOPUNKS ( ) | 5901776729714157 | 0.000000 |
| 2022-04-27T17:48:18Z | None | 28932221174799876 | 0.000000 |
| 2022-04-27T17:53:12Z | CRYPTOPUNKS ( ) | 6838075277247300 | 174127.151367 |
| 2022-04-27T17:59:35Z | CRYPTOPUNKS ( ) | 4845298000000000 | 182552.658691 |
| 2022-04-27T18:00:07Z | CRYPTOPUNKS ( ) | 1797562348480696 | 0.000000 |

### 0.10 2.a Cryptopunks Historical Sales

[14]:
```
# Filter Through data for non null transactions
cryptopunks_sales_df = cryptopunks_tx_df[cryptopunks_tx_df['value_quote'] != 0]
cryptopunks_sales =␣
 ↪cryptopunks_sales_df[cryptopunks_sales_df['to_address_label'].notnull()].
 ↪dropna()


# Creating the plot using plotly express
cryptopunks_fig = px.bar(cryptopunks_sales,
                         x='to_address_label',
                         y= 'value_quote',
                         color='value_quote',
                         height=1020,
                         width = 1000,
                         barmode = 'overlay',
                         labels={'value_quote':'Amount in USD',␣
 ↪'to_address_label': 'Exchange'},
                         title='USD spent to buy Cryptopunks in recent 1000␣
 ↪transactions'
                        )
cryptopunks_fig.show()
```