

TASK1_2347244.R

rpdpr

2023-11-06

#1. Create a vector named sales_data with the following sales figures (in thousands of dollars) for the last 12 months:

```
#[45, 60, 35, 75, 80, 62, 48, 53, 69, 72, 40, 55].
```

```
sales_data <- c(45,60,35,75,80,62,48,53,69,72,40,55)
```

```
months<-c("Jan","Feb","March","Apr","May","June","July","Aug","Sep","Oct","Nov","Dec")
```

#2. Calculate the total annual sales by summing the elements in the sales_data vector.

```
sum.sales_data=sum(sales_data)
```

```
print(sum.sales_data)
```

```
## [1] 694
```

#3. Compute the monthly average sales by dividing the total annual sales by 12 (the number of months).

```
average.sales_data=sum.sales_data/length(months)
```

```
print(average.sales_data)
```

```
## [1] 57.83333
```

#4. Determine the month with the highest sales and the corresponding sales figure. Also, find the month with the lowest sales and its sales figure.

```
maxSalesIndex<-order(sales_data,decreasing = TRUE)[1]
```

```
maxSalesMonth<-months[maxSalesIndex]
```

```
maxSalesValue<-sales_data[maxSalesIndex]
```

```
print(maxSalesMonth)
```

```
## [1] "May"
```

```
print(maxSalesValue)
```

```
## [1] 80
```

```
minSalesIndex<-order(sales_data)[1]
```

```
minSalesMonth<-months[minSalesIndex]
```

```
minSalesValue<-sales_data[minSalesIndex]
```

```
print(minSalesMonth)
```

```
## [1] "March"
```

```
print(minSalesValue)
```

```
## [1] 35
```

```
#5.Increase the sales figure for the third month (March) by 10%.  
sales_data[3]=sales_data[3]+sales_data[3]/10  
print(sales_data)
```

```
## [1] 45.0 60.0 38.5 75.0 80.0 62.0 48.0 53.0 69.0 72.0 40.0 55.0
```

```
#6.Sort the sales_data vector in ascending order and create a new vector named sorted_sales.  
sorted_sales<-sort(sales_data)  
print(sorted_sales)
```

```
## [1] 38.5 40.0 45.0 48.0 53.0 55.0 60.0 62.0 69.0 72.0 75.0 80.0
```

```
#7.Sort the sales_data vector in descending order and create a new vector named reverse_sorted_sales.  
reverse_sorted_sales<-sort(sales_data,decreasing = TRUE)  
print(reverse_sorted_sales)
```

```
## [1] 80.0 75.0 72.0 69.0 62.0 60.0 55.0 53.0 48.0 45.0 40.0 38.5
```

```
#8.Calculate the median sales value from the sorted_sales vector.  
median_sales<-median(sorted_sales)  
print(median_sales)
```

```
## [1] 57.5
```