

R-Exercise.R

rojal

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#1.1.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)
```

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

```
total=sum(sales_data)
```

```
print(total)
```

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

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

```
monthly_avg=total/12
```

```
print(monthly_avg)
```

```
## [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.

```
high_Sale=max(sales_data)
```

```
print(high_Sale)
```

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

```
match(high_Sale,sales_data)#for month
```

```
## [1] 5
```

```
low_sale=min(sales_data)
```

```
print(low_sale)
```

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

```
match(low_sale,sales_data)
```

```
## [1] 3
```

```
#5.Increase the sales figure for the third month (March) by 10%  
inc=sales_data[3]+sales_data[3]*0.1  
print(inc)
```

```
## [1] 38.5
```

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

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

```
## [1] 80 75 72 69 62 60 55 53 48 45 40 35
```

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

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