



CHRIST

(DEEMED TO BE UNIVERSITY)

B A N G A L O R E • I N D I A

Department Of Computer Science

100 Days Of C

Day1: Best Time to Buy and Sell Stock

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Code

```
#include <stdio.h>

#include <stdlib.h>

//Finding best day to buy, sell and the profit
int maxProfit(int* prices, int pricesSize){
    int profit = 0, buyi = 0;
    for (int i = 1; i < pricesSize; i++)
    {
        if(prices[i] - prices[buyi] > profit)
        {
            profit = prices[i] - prices[buyi];
        }
        else if(prices[i] - prices[buyi] < 0)
        {
            buyi = i;
        }
    }
    return profit;
}

void main()
{
    //Prices Array and number of days(n)
    int *prices;
    int n, i;

    //Start
```

```

printf("\n=====Best Day to Buy and Sell Stocks=====");

//Getting number of days
printf("\nEnter number of days: ");
scanf("%d", &n);
prices = (int*)malloc(n * sizeof(int));

//Getting prices
printf("\nEnter Prices...");

for(i = 0; i < n; i++)
{
    printf("\nDay no.%d: ", i+1);
    scanf("%d", &prices[i]);
}

printf("%d", maxProfit(prices, n));

}

```

Output

```

=====Best Day to Buy and Sell Stocks=====
Enter number of days: 5

Enter Prices...
Day no.1: 76

Day no.2: 45

Day no.3: 67

Day no.4: 86

Day no.5: 21

Max Profit: 41
-----
Process exited after 10.46 seconds with return value 15
Press any key to continue . . .

```