Section 4 Practice Assignment

Question 1: Find the mean of the following values of volumes:

151.2, 150.5, 149.2, 147.5, 152.9, 152.0, 151.3, 149.7, 149.4, 150.7

```
machine1 <- c(151.2, 150.5, 149.2, 147.5, 152.9, 152.0, 151.3, 149.7, 149.4,
150.7)
mean(machine1)

## [1] 150.44
```

Question 2: Create a vector with name as **df** containing the odd numbers between 4 and 500.(starting with 5 and ending with 499)

```
df <- c(seq(5, 500, by = 2))
df

##   [1]   5   7   9  11  13  15  17  19  21  23  25  27  29  31  33  35  37
##  [18]  39  41  43  45  47  49  51  53  55  57  59  61  63  65  67  69  71
##  [35]  73  75  77  79  81  83  85  87  89  91  93  95  97  99 101 103 105
##  [52] 107 109 111 113 115 117 119 121 123 125 127 129 131 133 135 137 139
##  [69] 141 143 145 147 149 151 153 155 157 159 161 163 165 167 169 171 173
##  [86] 175 177 179 181 183 185 187 189 191 193 195 197 199 201 203 205 207
## [103] 209 211 213 215 217 219 221 223 225 227 229 231 233 235 237 239 241
## [120] 243 245 247 249 251 253 255 257 259 261 263 265 267 269 271 273 275
## [137] 277 279 281 283 285 287 289 291 293 295 297 299 301 303 305 307 309
## [154] 311 313 315 317 319 321 323 325 327 329 331 333 335 337 339 341 343
## [171] 345 347 349 351 353 355 357 359 361 363 365 367 369 371 373 375 377
## [188] 379 381 383 385 387 389 391 393 395 397 399 401 403 405 407 409 411
## [205] 413 415 417 419 421 423 425 427 429 431 433 435 437 439 441 443 445
## [222] 447 449 451 453 455 457 459 461 463 465 467 469 471 473 475 477 479
## [239] 481 483 485 487 489 491 493 495 497 499
```

Question 3:

What will be result of the following code

```
num.a <- c(1,2,4,6,7)
num.a[5]

## [1] 7
```

Question 4:

What will be result of following code: Choose between two answer options.

```
stu.hours <- c(20,24,46,62,22,37,45,27,65,23)
stu.matrix <- matrix(stu.hours, nrow=5)
stu.matrix
```

```
##      [,1] [,2]
## [1,]   20   37
## [2,]   24   45
## [3,]   46   27
## [4,]   62   65
## [5,]   22   23
```

Correct choice is option B.

Answer option A:

```
stu.hours <- c(20,24,46,62,22,37,45,27,65,23)
stu.matrix <- matrix(stu.hours, nrow=5, byrow=TRUE)
stu.matrix
```

```
##      [,1] [,2]
## [1,]   20   24
## [2,]   46   62
## [3,]   22   37
## [4,]   45   27
## [5,]   65   23
```

Answer Option B

```
stu.hours <- c(20,24,46,62,22,37,45,27,65,23)
stu.matrix <- matrix(stu.hours, nrow=5)
stu.matrix
```

```
##      [,1] [,2]
## [1,]   20   37
## [2,]   24   45
## [3,]   46   27
## [4,]   62   65
## [5,]   22   23
```

Question 5: Create a data frame using below two vectors.

```
stu.hours <- c(20,24,46,62,22,37,45,27,65,23)
stu.marks <- c(40,55,69,83,27,44,61,33,71,37)

stu.data <- data.frame(stu.hours, stu.marks)
stu.data
```

```
##    stu.hours stu.marks
## 1         20        40
## 2         24        55
## 3         46        69
## 4         62        83
## 5         22        27
## 6         37        44
## 7         45        61
## 8         27        33
```

```
## 9          65         71
## 10         23         37
```