```
result.txt
#Test cases given in the assignmnet, prints all contents when search
#text is empty.
java -cp . csci e97. asn3. test. TestDri ver countri es. csv devi ces. csv
products.csv collections.csv
processing command: search_collection, BIRDS
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = angry Birds , minRating = null , maxPrice = null ,
countryCode = null , contentLanguages = []}
Id = ANGRY_BIRDS_COLLECTION
Name = Angry Birds Collection
Description = All available Angry Birds Applications
        Type = application
        Id = angry_birds_star_wars
        Name = Ăngry Birds Star Wars
        Description = A long time ago in a galaxy far, far away... a
group of desperate rebel birds faced off against a galactic menace: the
Empire's evil Pigtroopers!
        Author = Rovio
        Price = 1.5
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.
png
        Type = application
        Id = angry_birds
        Name = Angry Birds
        Description = The survival of the Angry Birds is at stake. Dish
out revenge on the greedy pigs who stole their eggs. Use the unique
powers of each bird to destroy the pigs' defenses. Angry Birds
features challenging physics-based gameplay and hours of replay value.
Each level requires logic, skill, and force to solve
        Author = Rovio
        Price = 1.5
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.
png
```

Page 1

Type = application

```
result.txt
```

```
Id = angry_bi rds_seasons
        Name = Angry Birds Seasons
        Description = Angry Birds Seasons takes the captivating gameplay
of the original to a whole new level! From Halloween to Chinese New
Year, the birds are celebrating different festive seasons around the
worl d!
        Author = Rovio
        Price = 1.5
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
Categories = [en_us, en_ca, en_gb]
        Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/l con_downl oad_seasons_223x223.
png
processing command: search_collection, free
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = null , minRating = null , maxPrice = 0.0 ,
countryCode = null , contentLanguages = []}
Id = FREE_COLLECTION
Name = Free
Description = All available Free Content
        Type = application
        Id = BBC_News
        Name = \overline{BBC} News
        Description = Get the latest world and regional news from the
BBC's global network of more than 2000 journalists.
        Ăuthor = BBC
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh5.ggpht.com/vnMgeTk8u86eSw3k70I_ALnAmeh1mQnun14Jr5kPirI5Wh7wKY
rgU40m71TLz3I3ur_K=w300-rw
        Type = application
        Id = FOX_News
        Name = Fox News
        Description = Read the latest headlines and watch the latest
videos from Fox News on your Android Device!
        Author = FoxNews.com
        Price = 0.0
        Rating = 2
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA, CANADA,
```

```
MEXICO, FINLAND]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_gb]
        Image URL =
https://lh6.ggpht.com/Tr0B350jeeVZHLneoX63X1816biC0qV6N39e2Zz5jT8QXG1mQh
EgtS1XapwKdxAJ8 np=w300-rw
        Type = ringtone
        Id' = rt1
        Name = Ferrari 575M Maranello - 2002
        Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
        Devices = [Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
http://p.d.ovi.com/p/g/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
        Type = application
        Id = Score_Center
        Name = ScoreCenter
        Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/YPRbjg1sofJOcjetFoVNZIx4oaNjkmnezWVoba-
D9XxR1e2DKhHFqBbsx5xfooLIeSo=w300-rw
        Type = application
Id = NPR_News
        Name = NPR News
        Description = Read, listen, or create a playlist of your
favorite NPR stories and share with friends.
```

Page 3

result.txt Author = NPRPrice = 0.0Rating = 5Countries = [UNITED STATES, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] Image URL = https://Ih4.ggpht.com/AnC8LtJK3CzWLuMrVee3FMgNrGcKXDPjtygeNfkLmV078Tu5C9 L_bxcR0tEnnluu_e8=w300-rw Type = application Id = Cricket_WorldCup_Fever Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete cricket game for your Android Phone. Play with your favourite cricket national team in 4 exciting modes of play - "Quick Match", "PowerPlay" "World Cup� and the turn based styled "Pass-N-Play" modes. Author = Indiagames Ltd. Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] Image URL = https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2HbdSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw Type = application Id = Yahoo!_Sports Name = Yahoo! Sports Description = Get blazing fast live scores, stats, and standings personalized for your favorite leagues, teams, and players Author = Yahoo! Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO] Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL = https://Ih4.ggpht.com/MzcZpm3IitAaHgfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL PuuzfpVw3ta9oGKEY=w300-rw Type = application Id = Stick_Cricket_Premier_League Name = Stick Cricket Premier League Description = Your ticket to the bright lights of Premier League super stardom is here. From the creators of the most popular cricket

Page 4

game in the world.

Author = Stick Sports Ltd

```
Price = 0.0
         Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
I mage URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGgmYcEND-PGoQfIWPDoJcOA=w300-rw
         Type = wallpaper
         Id = HD_Wall papers_for_Android
        Name = HD Wallpapers for Android
Description = Qualitative and convenient for application of HD
Wallpaper for Android.
        Author = PowerAPP
         Price = 0.0
         Rating = 4
         Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         Image URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpq0x9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
processing command: search_collection, cricket
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = cricket , minRating = null , maxPrice = null ,
countryCode = null , contentLanguages = []}
Id = CRICKET_COLLECTION
Name = Cricket
Description = All things Cricket
         Type = application
         Id = Cricket_WorldCup_Fever
        Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
         Author = Indiagames Ltd.
         Price = 0.0
         Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         I mage URL =
https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
                                           Page 5
```

```
Type = application
        Id = Stick_Cricket_Premier_League
        Name = Stick Cricket Premier League
        Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGgmYcEND-PGoQfIWPDoJcOA=w300-rw
processing command: search_collection , sports
Type = static_collection
Id = SPORTS_COLLECTION
Name = sports
Description = cool sports apps
        Type = application
        Id = Yahoo!_Sports
        Name = Yahoo! Sports
        Description = Get blazing fast live scores, stats, and standings
personalized for your favorite leagues, teams, and players
        Author = Yahoo!
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [I Phone 5, I Phone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://Ih4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL
PuuzfpVw3ta9oGKEY=w300-rw
        Type = application
        Id = Score_Center
        Name = ScoreCenter
        Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
```

```
result.txt
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/YPRbjg1sofJOcjetFoVNZIx4oaNjkmnezWVoba-
D9XxR1e2DKhHFgBbsx5xfooLIeSo=w300-rw
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = cricket , minRating = null , maxPrice = null ,
countryCode = null , contentLanguages = []}
Id = CRICKET_COLLECTION
Name = Cricket
Description = All things Cricket
        Type = application
Id = Cricket_WorldCup_Fever
        Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
        Author = Indiagames Ltd.
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.gqpht.com/3h_IfGL0aNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
        Type = application
        Id = Stick_Cricket_Premier_League
        Name = Stick Cricket Premier League
        Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
```

```
processing command: search_collection, neWs
Type = dynamic_collection: Criteria{contentCategories = [news] ,
contentType = [] , searchText = null , minRating = null , maxPrice = 0.0
  countryCode = null , contentLanguages = []}
Id = NEWS_APPS
Name = News Apps
Description = All about News
        Type = ringtone
        Id = rt1
        Name = Ferrari 575M Maranello - 2002
        Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
        Devices = [Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
http://p.d.ovi.com/p/g/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
        Type = application
        Id = Score_Center
        Name = ScoreCenter
        Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-
D9XxR1e2DKhHFgBbsx5xfooLIeSo=w300-rw
        Type = application
        Id = Cricket_WorldCup_Fever
        Name = Cricket WorldCup Fever
                                        Page 8
```

result.txt Description = "Cricket WorldCup Fever" is the most complete cricket game for your Android Phone. Play with your favourite cricket national team in 4 exciting modes of play - "Quick Match", "PowerPlay" "World Cup� and the turn based styled "Pass-N-Play" modes. Author = Indiagames Ltd. Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED KINGDOM, INDIA1 Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] I mage URL = https://lh3.ggpht.com/3h_IfGL0aNWYGGGnYaBs80hoK3yBUkyn2t7C2HbdSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw Type = application Id = Yahoo!_Sports Name = Yahoo! Sports Description = Get blazing fast live scores, stats, and standings personalized for your favorite leagues, teams, and players Author = Yahoo! Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO] Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL = https://Ih4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL PuuzfpVw3ta9oGKEY=w300-rw Type = application
Id = Stick_Cricket_Premier_League Name = Stick Cricket Premier League Description = Your ticket to the bright lights of Premier League super stardom is here. From the creators of the most popular cricket game in the world. Author = Stick Sports Ltd Price = 0.0 Rating = 4Countries = [UNITED STATES, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-3KpekM5oieQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw

Type = wallpaper
Id = HD_Wallpapers_for_Android
Name = HD Wallpapers for Android
Description = Qualitative and convenient for application of HD
Wallpaper for Android.

```
result.txt
```

```
Author = PowerAPP
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpq0x9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
Type = dynamic_collection: Criteria{contentCategories = [news],
contentType = [] , searchText = null , minRating = 3 , maxPrice = 0.0 ,
countryCode = null
                   , contentLanguages = []}
Id = MOST POPULAR NEWS APPS
Name = Most Popular News Apps
Description = Best rated news apps
        Type = ringtone
        Id = rt1
        Name = Ferrari 575M Maranello - 2002
        Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
        Devices = [Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
http://p.d.ovi.com/p/g/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
        Type = application
        Id = Score_Center
        Name = ScoreCenter
        Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
                                       Page 10
```

Image URL =

https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-D9XxR1e2DKhHFqBbsx5xfooLIeSo=w300-rw

> Type = application Id = Cricket_WorldCup_Fever Name = Cricket WorldCup Fever

Description = "Cricket WorldCup Fever" is the most complete

cricket game for your Android Phone. Play with your favourite cricket national team in 4 exciting modes of play - "Quick Match", "PowerPlay"

"World Cup� and the turn based styled "Pass-N-Play" modes.

Author = Indiagames Ltd.

Price = 0.0Rating = 5

Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KINGDOM, INDIA]

Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] Image URL =

https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2HbdSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw

> Type = applicationId = Yahoo! Sports Name = Yahoo! Sports

Description = Get blazing fast live scores, stats, and standings

personalized for your favorite leagues, teams, and players Author = Yahoo!

Price = 0.0Rating = 5

Countries = [UNITED STATES, CANADA, MEXICO] Devices = [IPhone 5, IPhone 6, Lumina 800]

Categories = [en_us, en_ca, en_gb]

Image URL =

https://Ih4.ggpht.com/MzcZpm3IitAaHgfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL PuuzfpVw3ta9oGKEY=w300-rw

Type = application

Id = Stick_Cricket_Premier_League Name = Stick Cricket Premier League

Description = Your ticket to the bright lights of Premier League

super stardom is here. From the creators of the most popular cricket

game in the world.

Author = Stick Sports Ltd Price = 0.0

Rating = 4

Countries = [UNITED STATES, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]

Categories = [en_us, en_ca, en_gb]
I mage URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-Page 11

```
3KpekM5oieQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
         Type = wallpaper
Id = HD_Wallpapers_for_Android
         Name = HD Wallpapers for Android
         Description = Qualitative and convenient for application of HD
Wallpaper for Android.
         Author = PowerAPP
         Price = 0.0
         Rating = 4
        Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
Categories = [en_us, en_ca, en_gb]
         I mage URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpgOx9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
processing command: search_collection , null
Type = dynamic_collection: Criteria{contentCategories = [news] ,
contentType = [] , searchText = null , minRating = null , maxPrice = 0.0
, countryCode = null , contentLanguages = []}
Id = NEWS_APPS
Name = News Apps
Description = All about News
         Type = ringtone
         Id' = rt1
         Name = Ferrari 575M Maranello - 2002
         Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
         Author = Nutbags
         Price = 0.0
         Rating = 4
         Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANIA]
         Devices = [Lumina 800]
         Categories = [en_us, en_ca, en_gb]
         Image URL =
http://p.d.ovi.com/p/q/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
         Type = application
         Id = Score_Center
         Name = ScoreCenter
         Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
```

```
result.txt
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-
D9XxR1e2DKhHFqBbsx5xfooLIeSo=w300-rw
        Type = application
        Id = Cricket_WorldCup_Fever
        Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
        Author = Indiagames Ltd.
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
```

https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-

Type = application

Id = Yahoo!_Sports Name = Yahoo! Sports Description = Get blazing fast live scores, stats, and standings personalized for your favorite leagues, teams, and players Author = Yahoo! Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO] Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL =

https://Ih4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL PuuzfpVw3ta9oGKEY=w300-rw

> Type = application Id = Stick_Cricket_Premier_League Page 13

```
result.txt
        Name = Stick Cricket Premier League
        Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oieQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
        Type = wallpaper
        Id = HD_Wall papers_for_Android
        Name = HD Wallpapers for Android
        Description = Qualitative and convenient for application of HD
Wallpaper for Android.
        Author = PowerAPP
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpgOx9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = null , minRating = null , maxPrice = 0.0 ,
countryCode = null ,
Id = FREE_COLLECTION
                     contentLanguages = []}
Name = Free
Description = All available Free Content
        Type = application
        Id = BBC_News
        Name = BBC News
        Description = Get the latest world and regional news from the
BBC's global network of more than 2000 journalists.
        Author = BBC
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh5.ggpht.com/vnMqeTk8u86eSw3k70I_ALnAmeh1mQnun14Jr5kPi rI 5Wh7wKY
rqU40m71TLz3I 3ur_K=w300-rw
        Type = application
        Iď = FOX_News
```

```
result.txt
```

Name = Fox NewsDescription = Read the latest headlines and watch the latest videos from Fox News on your Android Device! Author = FoxNews.com Price = 0.0Rating = 2Countries = [UNITED STATES, UNITED KINGDOM, INDIA, CANADA, MEXICO, FINLAND] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_gb] Image URL = https://Ih6.ggpht.com/Tr0B350jeeVZHLneoX63X1816biC0qV6N39e2Zz5jT8QXG1mQh EgtS1XapwKdxAJ8_np=w300-rw Type = ringtoneIď = rt1 Name = Ferrari 575M Maranello - 2002 Description = This ringtone is a unique and exclusive recording of the 2002 Ferrari 575M Maranello being driven to its limits! Author = Nutbags Price = 0.0Rating = 4Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN, ALBANI A] Devices = [Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL = http://p.d.ovi.com/p/g/store/1492679/_02_Ferrari_575M_Maranello-192x192. png Type = application Id = Score_Center Name = ScoreCenter Description = ESPN ScoreCenter brings you scores, news and standings from sports leagues around the world. The new app makes it easier than ever to follow your favorite teams anytime, anywhere. Stay up to date on the latest scores with personalized scoreboards and alerts. Follow the nation's top stories with in-depth coverage and anal ysi s. Author = ESPNPrice = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED KI NGDOM] Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL =

https://Ih3.ggpht.com/YPRbjg1sofJOcjetFoVNZIx4oaNjkmnezWVoba-Page 15

```
D9XxR1e2DKhHFqBbsx5xfooLIeSo=w300-rw
         Type = application
Id = NPR_News
         Name = N\overline{P}R News
         Description = Read, listen, or create a playlist of your
favorite NPR stories and share with friends.
         Author = NPR
         Price = 0.0
         Rating = 5
         Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
Categories = [en_us, en_ca, en_gb]
         I mage URL =
https://Ih4.ggpht.com/AnC8LtJK3CzWLuMrVee3FMgNrGcKXDPjtygeNfkLmV078Tu5C9
L_bxcR0tEnnluu_e8=w300-rw
         Type = application
Id = Cricket_WorldCup_Fever
         Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
         Author = Indiagames Ltd.
Price = 0.0
         Rating = 5
         Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         I mage URL =
https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
         Type = application
         Id = Yahoo!_Sports
         Name = Yahoo! Sports
Description = Get blazing fast live scores, stats, and standings
personalized for your favorite leagues, teams, and players \quad \text{Author} = \text{Yahoo!}
         Price = 0.0
         Rating = 5
         Countries = [UNITED STATES, CANADA, MEXICO]
         Devices = [IPhone 5, IPhone 6, Lumina 800]
```

https://lh4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdLPuuzfpVw3ta9oGKEY=w300-rw

Categories = [en_us, en_ca, en_gb]

Image URL =

```
result.txt
         Type = application
         Id = Stick_Cricket_Premier_League
         Name = Stick Cricket Premier League
         Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
         Price = 0.0
         Rating = 4
         Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
         Type = wallpaper
         Id = HD_Wallpapers_for_Android
         Name = HD Wallpapers for Android
         Description = Qualitative and convenient for application of HD
Wallpaper for Android.
        Author = PowerAPP
         Price = 0.0
         Rating = 4
        Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         Image URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpgOx9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = angry Birds , minRating = null , maxPrice = null ,
countryCode = null , content
ld = ANGRY_BIRDS_COLLECTION
                     , contentLanguages = []}
Name = Angry Birds Collection
Description = All available Angry Birds Applications
         Type = application
         Id = angry_bi rds_star_wars
         Name = Angry Birds Star Wars
         Description = A long time ago in a galaxy far, far away... a
group of desperate rebel birds faced off against a galactic menace: the
Empire's evil Pigtroopers!
         Author = Rovio
         Price = 1.5
         Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
Devices = [IPhone 5, IPhone 6, Lumina 800]
Categories = [en_us, en_ca, en_gb]
```

assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.

Image URL = http://web-

```
png
```

```
Type = application
        Id = angry_birds
        Name = Āngry Birds
        Description = The survival of the Angry Birds is at stake. Dish
out revenge on the greedy pigs who stole their eggs. Use the unique
powers of each bird to destroy the pigs' defenses. Angry Birds
features challenging physics-based gameplay and hours of replay value.
Each level requires logic, skill, and force to solve
        Author = Rovio
        Price = 1.5
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.
png
        Type = application
        Id = angry_bi rds_seasons
        Name = Angry Birds Seasons
        Description = Angry Birds Seasons takes the captivating gameplay
of the original to a whole new level! From Halloween to Chinese New
Year, the birds are celebrating different festive seasons around the
worl d!
        Author = Rovio
        Price = 1.5
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/l con_downl oad_seasons_223x223.
png
Type = dynamic_collection: Criteria{contentCategories = [], contentType
= [] , searchText = cricket , minRating = null , maxPrice = null ,
countryCode = null , contentLanguages = []}
Id = CRICKET_COLLECTION
Name = Cricket
Description = All things Cricket
        Type = application
        Id = Cricket_WorldCup_Fever
        Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
```

Page 18

```
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
        Author = Indiagames Ltd.
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
        Type = application
        Id = Stick_Cricket_Premier_League
        Name = Stick Cricket Premier League
Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
I mage URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGgmYcEND-PGoQfIWPDoJcOA=w300-rw
Type = dynamic_collection: Criteria{contentCategories = [news] ,
contentType = [] , searchText = null , minRating = 3 , maxPrice = 0.0 ,
countryCode = null ,
                     contentLanguages = []}
Id = MOST_POPULAR_NEWS_APPS
Name = Most Popular News Apps
Description = Best rated news apps
        Type = ringtone
        Id' = rt1
        Name = Ferrari 575M Maranello - 2002
Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
        Devices = [Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
http://p.d.ovi.com/p/q/store/1492679/_02_Ferrari_575M_Maranello-
```

```
192x192. png
```

Type = application Id = Score_Center Name = ScoreCenter

Description = ESPN ScoreCenter brings you scores, news and standings from sports leagues around the world. The new app makes it easier than ever to follow your favorite teams anytime, anywhere. Stay up to date on the latest scores with personalized scoreboards and alerts. Follow the nationâ \in ^{MS} top stories with in-depth coverage and analysis.

Author = ESPN Price = 0.0 Rating = 5

Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KI NGDOM]

Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL =

https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-D9XxR1e2DKhHFgBbsx5xfooLleSo=w300-rw

Type = application Id = Cricket_WorldCup_Fever Name = Cricket WorldCup Fever

Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete

cricket game for your Android Phone. Play with your favourite cricket

national team in 4 exciting modes of play - "Quick Match", "PowerPlay"

"World Cup� and the turn based styled "Pass-N-Play" modes.

Author = Indiagames Ltd.

Price = 0.0 Rating = 5

Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KINGDOM, INDIA]

Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] Image URL =

https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-dSUP1rAKPBT_khEtaSgenkc2UBI=w300-rw

Type = application
Id = Yahoo!_Sports
Name = Yahoo! Sports

Name = Yahoo! Sports Description = Get blazing fast live scores, stats, and standings

personalized for your favorite leagues, teams, and players Author = Yahoo! Price = 0.0

Rating = 5

```
result.txt
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://Ih4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL
PuuzfpVw3ta9oGKEY=w300-rw
        Type = application
        Id = Stick_Cricket_Premier_League
        Name = Stick Cricket Premier League
        Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
        Type = wallpaper
        Id = HD_Wallpapers_for_Android
        Name = HD Wall papers for Android
        Description = Qualitative and convenient for application of HD
Wallpaper for Android.
        Author = PowerAPP
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        I mage URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpgOx9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
Type = static_collection
Id' = SPORTS_COLLECTION
Name = sports
Description = cool sports apps
        Type = application
        Id = Yahoo!_Sports
        Name = Yahoo! Sports
        Description = Get blazing fast live scores, stats, and standings
personalized for your favorite leagues, teams, and players
Author = Yahoo!
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        I mage URL =
                                        Page 21
```

https://lh4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdLPuuzfpVw3ta9oGKEY=w300-rw

Type = application Id = Score_Center Name = ScoreCenter

Description = ESPN ScoreCenter brings you scores, news and standings from sports leagues around the world. The new app makes it easier than ever to follow your favorite teams anytime, anywhere. Stay up to date on the latest scores with personalized scoreboards and alerts. Follow the nation's top stories with in-depth coverage and analysis.

Author = ESPN Price = 0.0 Rating = 5 Countries = [1

Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KI NGDOM]

Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL =

https://lh3.ggpht.com/YPRbjg1sofJOcjetFoVNZIx4oaNjkmnezWVoba-D9XxR1e2DKhHFgBbsx5xfooLleSo=w300-rw

Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = cricket , minRating = null , maxPrice = null ,

countryCode = null , contentLanguages = []}
Id = CRICKET_COLLECTION

Name = Cricket

Description = All things Cricket

Type = application Id = Cricket_WorldCup_Fever Name = Cricket WorldCup Fever

Description = "Cricket WorldCup Fever" is the most complete cricket game for your Android Phone. Play with your favourite cricket national team in 4 exciting modes of play - "Quick Match", "PowerPlay" "World Cup� and the turn based styled "Pass-N-Play" modes.

Author = Indiagames Ltd.

Price = 0.0

Rating = 5

Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KINGDOM, INDIA]

Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] Image URL =

https://Ih3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-Page 22

dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw Type = application
Id = Stick_Cricket_Premier_League Name = Stick Cricket Premier League Description = Your ticket to the bright lights of Premier League super stardom is here. From the creators of the most popular cricket game in the world. Author = Stick Sports Ltd Price = 0.0 Rating = 4
Countries = [UNITED STATES, UNITED KINGDOM, INDIA] Devices = [I Phone 5, I Phone 6, Lumi na 800, HTC One]
Categories = [en_us, en_ca, en_gb]
I mage URL = https://lh3.ggpht.com/nrgUEydCC3i FXFPwFLChDj L3t2V-3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw #Exception when adding product that does not exist in product service java -cp . cscie97.asn3.test.TestDriver countries.csv devices.csv products.csv collections_prod_doesntExist.csv cscie97.asn3.ecommerce.collection.CollectionServiceException: Collection Parameter Exception: Property Name: [SCORE_CENTER_TEST] and Property value : [Content does not exist] #Exception when adding collection that does not exist in product service java -cp . csci e97. asn3. test. TestDri ver countri es. csv devi ces. csv products.csv collections_collDoesNtExist.csv cscie97.asn3.ecommerce.collection.CollectionServiceException: Collection Parameter Exception: Property Name: [CRICKET_COLLECTION_TEST] and Property value: [Collection does not exist] ############### #searching collection when no collection in the store with matching #search text

```
result.txt
java -cp . cscie97.asn3.test.TestDriver countries.csv devices.csv
products.csv collections_NoMatchingCollection.csv
processing command: search_collection, NO_SEARCH_RESULT
No Results Found...
#######
#Case insensitive search
java -cp . cscie97.asn3.test.TestDriver countries.csv devices.csv
products.csv collections_ignoreCaseSearch.csv
processing command: search_collection, BIRDS
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = angry Birds , minRating = null , maxPrice = null ,
countryCode = null , contentLanguages = []}
Id = ANGRY_BIRDS_COLLECTION
Name = Angry Birds Collection
Description = All available Angry Birds Applications
       Type = application
       Id = angry_birds_star_wars
       Name = Ăngry Birds Star Wars
       Description = A long time ago in a galaxy far, far away... a
group of desperate rebel birds faced off against a galactic menace: the
Empire's evil Pigtroopers!
       Author = Rovio
       Price = 1.5
       Rating = 5
       Countries = [UNITED STATES, CANADA, MEXICO]
       Devices = [IPhone 5, IPhone 6, Lumina 800]
       Categories = [en_us, en_ca, en_gb]
       Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.
png
        Type = application
       Id = angry_birds
       Name = \breve{A}n\breve{g}ry Birds
       Description = The survival of the Angry Birds is at stake. Dish
out revenge on the greedy pigs who stole their eggs. Use the unique
powers of each bird to destroy the pigs' defenses. Angry Birds
features challenging physics-based gameplay and hours of replay value.
Each level requires logic, skill, and force to solve
       Author = Rovio
       Price = 1.5
```

```
result.txt
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.
        Type = application
        Id = angry_bi rds_seasons
        Name = Ångry Birds Seasons
        Description = Angry Birds Seasons takes the captivating gameplay
of the original to a whole new level! From Halloween to Chinese New
Year, the birds are celebrating different festive seasons around the
        Author = Rovio
        Price = 1.5
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL = http://web-
assets. angrybi rds. com/abcom/i mg/games/223/I con_downI oad_seasons_223x223.
processing command: search_collection , FREE
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = null , minRating = null , maxPrice = 0.0 ,
countryCode = null ,
                    contentLanguages = []}
Id = FREE_COLLECTION
Name = Free
Description = All available Free Content
        Type = application
Id = BBC_News
        Name = \overline{BBC} News
        Description = Get the latest world and regional news from the
BBC's global network of more than 2000 journalists.
        Author = BBC
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
```

pnq

worl d!

png

https://lh5.ggpht.com/vnMqeTk8u86eSw3k70I_ALnAmeh1mQnun14Jr5kPirI5Wh7wKY rgU40m71TLz3I3ur_K=w300-rw

Categories = [en_us, en_ca, en_gb]

Image URL =

```
result.txt
```

```
Type = application
Id = FOX_News
        Name = Fox News
        Description = Read the latest headlines and watch the latest
videos from Fox News on your Android Device!
        Author = FoxNews.com
        Price = 0.0
        Rating = 2
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA, CANADA,
MEXICO, FINLAND]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_gb]
        Image URL =
https://lh6.ggpht.com/Tr0B350jeeVZHLneoX63X1816biC0qV6N39e2Zz5jT8QXG1mQh
EqtS1XapwKdxAJ8_np=w300-rw
        Type = ringtone
        Id' = rt1
        Name = Ferrari 575M Maranello - 2002
        Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
        Devices = [Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
http://p.d.ovi.com/p/g/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
        Type = application
        Id = Score_Center
        Name = ScoreCenter
        Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        I mage URL =
                                       Page 26
```

```
https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-
D9XxR1e2DKhHFgBbsx5xfooLIeSo=w300-rw
         Type = application
         Id = NPR_News
         Name = N\overline{P}R News
         Description = Read, listen, or create a playlist of your
favorite NPR stories and share with friends.
         Author = NPR
Price = 0.0
         Rating = 5
Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         I mage URL =
https://Ih4.ggpht.com/AnC8LtJK3CzWLuMrVee3FMgNrGcKXDPjtygeNfkLmV078Tu5C9
L bxcR0tEnnluu e8=w300-rw
         Type = application
         Id = Cricket_WorldCup_Fever
         Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
         Author = Indiagames Ltd.
         Price = 0.0
         Rating = 5
         Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         Image URL =
https://lh3.gqpht.com/3h_IfGL0aNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
         Type = application
Id = Yahoo!_Sports
Name = Yahoo! Sports
Description = Get blazing fast live scores, stats, and standings
personalized for your favorite leagues, teams, and players \quad \text{Author} = \text{Yahoo!}
         Price = 0.0
         Rating = 5
         Countries = [UNITED STATES, CANADA, MEXICO]
Devices = [IPhone 5, IPhone 6, Lumina 800]
         Categories = [en_us, en_ca, en_gb]
         Image URL =
```

https://Ih4.ggpht.com/MzcZpm3IitAaHgfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL

```
PuuzfpVw3ta9oGKEY=w300-rw
         Type = application
Id = Stick_Cricket_Premier_League
Name = Stick Cricket Premier League
Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
         Author = Stick Sports Ltd
          Price = 0.0
          Rating = 4
         Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
Categories = [en_us, en_ca, en_gb]
Image URL = https://lha.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
         Type = wallpaper
Id = HD_Wallpapers_for_Android
          Name = HD Wallpapers for Android
          Description = Qualitative and convenient for application of HD
Wallpaper for Android.
         Author = PowerAPP
         Price = 0.0
          Rating = 4
         Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
          Categories = [en_us, en_ca, en_gb]
          Image URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpq0x9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
processing command: search_collection, CRICKET
Type = dynamic_collection: Criteria{contentCategories = [] , contentType
= [] , searchText = cricket , minRating = null , maxPrice = null ,
countryCode = null , contentLanguages = []}
Id = CRICKET_COLLECTION
Name = Cricket
Description = All things Cricket
          Type = application
          Id = Cricket_WorldCup_Fever
          Name = Cricket WorldCup Fever
          Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
          Author = Indiagames Ltd.
          Price = 0.0
```

```
result.txt
```

Rating = 5Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] I mage URL = https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2HbdSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw Type = application Id = Stick_Cricket_Premier_League Name = Stick Cricket Premier League Description = Your ticket to the bright lights of Premier League super stardom is here. From the creators of the most popular cricket game in the world. Author = Stick Sports Ltd Price = 0.0Rating = 4Countries = [UNITED STATES, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-3KpekM5oieQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw processing command: search_collection , SPORTS Type = static_collection Id = SPORTS_COLLECTION Name = sports Description = cool sports apps Type = application Id = Yahoo! _Sports Name = Yahoo! Sports Description = Get blazing fast live scores, stats, and standings personalized for your favorite leagues, teams, and players Author = Yahoo! Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO] Devices = [I Phone 5, I Phone 6, Lumi na 800] Categori es = [en_us, en_ca, en_gb] Image URL = https://lh4.ggpht.com/MzcZpm3litAaHqfl4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL PuuzfpVw3ta9oGKEY=w300-rw Type = application Id = Score_Center Name = ScoreCenter Description = ESPN ScoreCenter brings you scores, news and standings from sports leagues around the world. The new app makes it Page 29

easier than ever to follow your favorite teams anytime, anywhere. Stay up to date on the latest scores with personalized scoreboards and alerts. Follow the nation's top stories with in-depth coverage and anal ysi s. Author = ESPNPrice = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED KI NGDOM] Devices = [IPhone 5, IPhone 6, Lumina 800] Categories = [en_us, en_ca, en_gb] Image URL = https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-D9XxR1e2DKhHFgBbsx5xfooLIeSo=w300-rw Type = dynamic_collection: Criteria{contentCategories = [] , contentType = [] , searchText = cricket , minRating = null , maxPrice = null , countryCode = null , contentLanguages = []} Id = CRICKET_COLLECTION Name = CricketDescription = All things Cricket Type = application
Id = Cricket_WorldCup_Fever Name = Cricket WorldCup Fever Description = "Cricket WorldCup Fever" is the most complete cricket game for your Android Phone. Play with your favourite cricket national team in 4 exciting modes of play - "Quick Match", "PowerPlay" "World Cup� and the turn based styled "Pass-N-Play" modes. Author = Indiagames Ltd. Price = 0.0Rating = 5Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED KINGDOM, INDIA] Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One] Categories = [en_us, en_ca, en_gb] Image URL = https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2HbdSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw Type = application Id = Stick_Cricket_Premier_League Name = Stick Cricket Premier League Description = Your ticket to the bright lights of Premier League

Page 30

super stardom is here. From the creators of the most popular cricket

game in the world.

```
result.txt
```

Author = Stick Sports Ltd

```
Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
Image URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
processing command: search_collection, NEWS
Type = dynamic_collection: Criteria{contentCategories = [news] ,
contentType = [] , searchText = null , minRating = null , maxPrice = 0.0
, countryCode = null , contentLanguages = []}
Id = NEWS_APPS
Name = News Apps
Description = All about News
        Type = ringtone
        Id = rt1
        Name = Ferrari 575M Maranello - 2002
        Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
        Devices = [Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
http://p.d.ovi.com/p/g/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
        Type = application
        Id = Score_Center
        Name = ScoreCenter
        Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
alerts. Follow the nation's top stories with in-depth coverage and
anal ysi s.
        Author = ESPN
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KI NGDOM]
```

```
Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-
D9XxR1e2DKhHFgBbsx5xfooLIeSo=w300-rw
        Type = application
        Id = Cricket_WorldCup_Fever
        Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket
national team in 4 exciting modes of play - "Quick Match", "PowerPlay"
"World Cup� and the turn based styled "Pass-N-Play" modes.
        Author = Indiagames Ltd.
        Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED
KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://lh3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-
dSUP1rAKPBT_khEtaSgenkc2UBI =w300-rw
        Type = application
        Id = Yahoo!_Sports
        Name = Yahoo! Sports
        Description = Get blazing fast live scores, stats, and standings
Price = 0.0
        Rating = 5
        Countries = [UNITED STATES, CANADA, MEXICO]
        Devices = [IPhone 5, IPhone 6, Lumina 800]
        Categories = [en_us, en_ca, en_gb]
        Image URL =
https://Ih4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdL
PuuzfpVw3ta9oGKEY=w300-rw
        Type = application
        Id = Stick_Cricket_Premier_League
        Name = Stick Cricket Premier League
        Description = Your ticket to the bright lights of Premier League
super stardom is here. From the creators of the most popular cricket
game in the world.
        Author = Stick Sports Ltd
        Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
                                      Page 32
```

```
result.txt
        Categories = [en_us, en_ca, en_gb]
I mage URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oi eQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
         Type = wallpaper
         Id = HD_Wallpapers_for_Android
         Name = HD Wallpapers for Android
         Description = Qualitative and convenient for application of HD
Wallpaper for Android.
        Author = PowerAPP
Price = 0.0
        Rating = 4
Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
         Categories = [en_us, en_ca, en_gb]
         I mage URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJIOUTWpgOx9reGKehLnj6IdOLdOpq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
Type = dynamic_collection: Criteria{contentCategories = [news],
contentType = [] , searchText = null , minRating = 3 , maxPrice = 0.0 ,
countryCode = null , contentLanguages = []}
Id = MOST_POPULAR_NEWS_APPS
Name = Most Popular News Apps
Description = Best rated news apps
         Type = ringtone
         Id' = rt1
         Name = Ferrari 575M Maranello - 2002
         Description = This ringtone is a unique and exclusive recording
of the 2002 Ferrari 575M Maranello being driven to its limits!
        Author = Nutbags
         Price = 0.0
         Rating = 4
        Countries = [UNITED STATES, CANADA, MEXICO, AFGHANISTAN,
ALBANI A]
         Devices = [Lumina 800]
         Categories = [en_us, en_ca, en_gb]
         Image URL =
http://p.d.ovi.com/p/q/store/1492679/_02_Ferrari_575M_Maranello-
192x192. png
         Type = application
         Id = Score_Center
         Name = ScoreCenter
         Description = ESPN ScoreCenter brings you scores, news and
standings from sports leagues around the world. The new app makes it
easier than ever to follow your favorite teams anytime, anywhere. Stay
up to date on the latest scores with personalized scoreboards and
```

```
result.txt

alerts. Follow the nation's top stories with in-depth coverage and

analysis.

Author = ESPN
Price = 0.0
Rating = 5
Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KINGDOM]
Devices = [IPhone 5, IPhone 6, Lumina 800]
Categories = [en_us, en_ca, en_gb]
```

https://lh3.ggpht.com/YPRbjg1sofJ0cjetFoVNZIx4oaNjkmnezWVoba-

D9XxR1e2DKhHFgBbsx5xfooLIeSo=w300-rw

Type = application Id = Yahoo!_Sports

I mage URL =

Type = application
Id = Cricket_WorldCup_Fever
Name = Cricket WorldCup Fever
Description = "Cricket WorldCup Fever" is the most complete
cricket game for your Android Phone. Play with your favourite cricket

national team in 4 exciting modes of play - "Quick Match", "PowerPlay"

"World Cup� and the turn based styled "Pass-N-Play" modes.
Author = Indiagames Ltd.
Price = 0.0
Rating = 5
Countries = [UNITED STATES, CANADA, MEXICO, FINLAND, UNITED

KINGDOM, INDIA]
 Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
 Categories = [en_us, en_ca, en_gb]
 Image URL =

https://Ih3.ggpht.com/3h_IfGLOaNWYGGGnYaBs80hoK3yBUkyn2t7C2Hb-dSUP1rAKPBT_khEtaSgenkc2UBI=w300-rw

Name = Yahoo! Sports
Description = Get blazing fast live scores, stats, and standings

personalized for your favorite leagues, teams, and players
Author = Yahoo!
Price = 0.0
Rating = 5
Countries = [UNITED STATES, CANADA, MEXICO]
Devices = [IPhone 5, IPhone 6, Lumina 800]
Categories = [en_us, en_ca, en_gb]
Image URL =

https://Ih4.ggpht.com/MzcZpm3IitAaHqfI4hZnz8Bv8PfTykIc9A_In0BjbQk2XPZFdLPuuzfpVw3ta9oGKEY=w300-rw

Type = application
Id = Stick_Cricket_Premier_League
Name = Stick Cricket Premier League
Description = Your ticket to the bright lights of Premier League
Page 34

```
super stardom is here. From the creators of the most popular cricket
game in the world.

Author = Stick Sports Ltd

Price = 0.0
        Rating = 4
        Countries = [UNITED STATES, UNITED KINGDOM, INDIA]
         Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
I mage URL = https://lh3.ggpht.com/nrgUEydCC3iFXFPwFLChDjL3t2V-
3KpekM5oieQMPnMGqmYcEND-PGoQfIWPDoJcOA=w300-rw
         Type = wallpaper
        Id = HD_Wallpapers_for_Android
Name = HD Wallpapers for Android
        Description = Qualitative and convenient for application of HD
Wallpaper for Android.
Author = PowerAPP
        Price = 0.0

Rating = 4

Countries = [UNITED STATES, CANADA, INDIA, FINLAND]
        Devices = [IPhone 5, IPhone 6, Lumina 800, HTC One]
        Categories = [en_us, en_ca, en_gb]
         Image URL =
https://lh5.ggpht.com/GSvdQwJSpVoPyZJI0UTWpg0x9reGKehLnj6Id0Ld0pq1yfAEiG
AOkUm2Eu7H8vr-1A=w300-rw
########
```